

FY2013

BADGER ARMY AMMUNITION PLANT

Installation Action Plan

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Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern (AOC), and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RA).

In an effort to coordinate planning information between the restoration manager, the US Army Environmental Command (USAEC), Badger Army Ammunition Plant (BAAP), the Base Realignment and Closure (BRAC) Division, the Wisconsin Department of Natural Resources (WDNR), US Environmental Protection Agency (USEPA) Region V, the executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

Acronyms

AEDB-CC	Army Environmental Database - Compliance-related Cleanup
AEDB-R	Army Environmental Database - Restoration
AOC	Area of Concern
BAAP	Badger Army Ammunition Plant
BEBA	Badger Environmental Board of Advisors
BIA	Bureau of Indian Affairs
BRAC	Base Realignment and Closure
CC	Compliance-related Cleanup
CD	Compact Disc
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operation)
CMS	Corrective Measures Study
CR	Compliance Restoration
CS	Confirmatory Sampling
cy	cubic yard
DBG	Deterrent Burning Ground
DBP	Dibutyl-Phthalate
DD	Decision Document
DERP	Defense Environmental Restoration Program
DES	Design
DNT	Dinitrotoluene
DPA	Diphenylamine
ER,A	Environmental Restoration, Army
ERA	Environmental Risk Assessment
ESS	Explosive Safety Submission
FRA	Final Remedial Action
FS	Feasibility Study
FY	Fiscal Year
GGB	Gruber's Grove Bay
GIS	Geographic Information System
GSA	General Services Administration
GW	Groundwater
HCN	Ho-Chunk Nation
ID	Identification
IFCR	In-Field Condition Report
IR	Installation Restoration
IRA	Interim Remedial Action
IRM	Interim Remedial Measure
IRP	Installation Restoration Program
K	thousand
kg	kilogram
LTM	Long-Term Management
mg	milligram
MIRM	Modified Interim Remedial Measure

Acronyms

MMRP	Military Munitions Response Program
MR	Munitions Response
N/A	Not Applicable
NAC	Nitric Acid
NFA	No Further Action
NG	Nitroglycerine
NPL	National Priorities List
ODUSD (I&E)	Office of the Deputy Under Secretary of Defense for Installations and Environment
OM,A	Operations and Maintenance, Army
PA	Preliminary Assessment
PBC	Public Benefit Conveyance
PBG	Propellant Burning Ground
PCB	Polychlorinated Biphenyl
POL	Petroleum, Oil, and Lubricants
ppb	parts per billion
ppm	parts per million
RA	Remedial Action
RA(C)	Remedial Action - Construction
RA(O)	Remedial Action - Operation
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SAC	Sulfuric Acid Concentrator
SI	Site Inspection
SVE	Soil Vapor Extraction
SVOC	Semi-volatile organic compounds
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TRC	Technical Review Committee
USACHPPM	US Army Center for Health Promotion and Preventive Medicine
USAEC	US Army Environmental Command
USATHAMA	US Army Toxic and Hazardous Materials Agency
USDA	US Department of Agriculture
USEPA	US Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
WDNR	Wisconsin Department of Natural Resources

Installation Information

Installation Locale

Installation Size (Acreage): 7,275.24

City: Baraboo

County: Sauk

State: Wisconsin

Other Locale Information

The BAAP site is located on 7,275.24 acres of land in Sauk County, Wisconsin. It is bordered on the north by Devil's Lake State Park, on the east by farmland, State Highway 78, and the Wisconsin River, on the south by farmland, and on the west by US Highway 12. It is approximately nine miles south of Baraboo (pop. 10,771), and seven miles north of Sauk City and Prairie du Sac (population 3,109 and 3,231 respectively). Bluffview, a residential area with approximately 1,000 residents, is located directly west across Highway 12 from Badger's main gate. On Badger's east side, between Highway 78 and the Wisconsin River, there are several unincorporated residential developments with a projected population of 1,000 people when fully developed.

Installation Mission

The mission of the BAAP is to prepare the property for transfer from Army control to various federal land managers or their sponsored agents.

Lead Organization

Base Realignment and Closure Division

Lead Executing Agencies for Installation

USAEC, Cleanup and Munitions Division, West Branch

Regulator Participation

Federal USEPA, Region 5

State WDNR

National Priorities List (NPL) Status

BADGER ARMY AMMUNITION PLANT is not on the NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

RAB established 1993

Installation Program Summaries

IRP

Primary Contaminants of Concern: Explosives, Metals, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Volatiles (VOC)

Affected Media of Concern: Groundwater, Sediment, Soil

CR

Primary Contaminants of Concern: Explosives, Metals, Polychlorinated Biphenyls (PCB), Semi-volatiles (SVOC), Volatiles (VOC)

Affected Media of Concern: Soil

Cleanup Program Summary

Installation Historic Activity

The BAAP was constructed in 1942 in Sauk County, Wisconsin, near the city of Baraboo. The plant was operated intermittently over a 33-year period to produce single-base and double-base propellant for cannon, rocket, and small arms ammunition. Plant operation was terminated in March 1975 and all production facilities and many support functions were placed on standby status. Maintenance of standby facilities continued until 1998, when the Army declared BAAP excess to its needs.

Disposal of propellant waste in open burn pits and discharge of production wastewaters to open ditches and ponds appear to be the major sources of groundwater problems on and off the installation. Monitoring of groundwater indicates natural attenuation is occurring. Incidental soil contamination around painted production buildings has been investigated and remediated after the buildings were demolished.

Now the 7,275-acre facility is ready for changes in ownership. The General Services Administration (GSA) is the federal agency handling the property disposal. The proposed new owners are the US Department of Agriculture (USDA) for dairy forage research, the WDNR for a recreation area, and the town of Sumpter Bluffview Sanitary and Water District to continue services to the nearby residential community. The town will also acquire three historic cemeteries. Wisconsin Department of Transportation reconstructed US Highway 78 on portions of the installation.

Installation Program Cleanup Progress

IRP

- Prior Year Progress:** BAAP-001: Close site.
BAAP-012: Get municipal, state and ACSIM approval of municipal water system, reduce residential monitoring, reduce monitored natural attenuation (MNA) well sampling.
BAAP-33: Operate MIRM pump-and-treat, shut down interim remedial measure (IRM) system, and monitor groundwater rebound at source.
BAAP-35: Maintain caps and covers.
BAAP-40: Determine appropriate remedy.
BAAP-43: Complete demolition, continue soil investigations and closure process.
- Future Plan of Action:** BAAP-012: Get municipal approval of water system and start construction. Get WDNR approval of reduced groundwater monitoring. Refine MNA.
BAAP-33: Start modified interim remedial measure (MIRM) shutdown once IRM shutdown proved successful.
BAAP-35: Maintain caps and covers.
BAAP-40: Design sediment remedy and implement.
BAAP-43: Complete RI/RA and WDNR closures.

CR

- Prior Year Progress:** CC-BAAP-44: Get regulatory concurrence for completed remedial investigation (RI)/RA activities for sewers via closure letters for parcels.
- Future Plan of Action:** CC-BAAP-44: Completed regulatory concurrence in fiscal year (FY)2014.

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Begin Date	End Date	End FY
Complete	200804	200906	2009
Planned	201304	201307	2013

Last Completed 5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
PC&EPM FOR DETERRENT BURNING GROUND	BAAP-006
PC&EPM FOR PBG 1949 PIT & LANDFILL 1	BAAP-35
PC&EPM FOR PBG CONTAMINATED WASTE PITS	BAAP-33
PC&EPM FOR PBG RACETRACK AREA	BAAP-34
PC&EPM FOR SOUTHERN OFF-POST AREA	BAAP-012

ResultsBAAP-006: Cap as remedy working as designed. GW needs more evaluation. Biotreatment system needs modification & better measurement of effectiveness.

ActionsBAAP-006:evaluate biotreatment,define plume,add mon wells, define exit strategy.
Define central plume. BAAP-33:Optimize gw pump&treat, define exit strategy.

PlansBAAP 006: Modify closure agreemnt to end biotreatment in next 5 yrs & define end of gw monitoring. BAAP-33: Prepare Alt FS for gw to define end of gw monitoring.

Recommendations and Implementation Plans:

BAAP-006: The deterrent burning ground (DBG) biotreatment system was removed and cap restored to an impervious condition in 2012. No other soil actions are required: groundwater is addressed at BAAP-12.

BAAP-12: The site-wide groundwater issues [DBG, propellant burning ground (PBG), and central plume areas] are being addressed by the offer to install an off-site municipal water system (awaiting municipal approval) and continued MNA, per the alternative feasibility study (FS) approved by WDNR June 28, 2012.

BAAP-33: A vapor intrusion study for this solvent plume completed in accordance with USEPA and State guidance in spring 2012 found no problems. The first phase of the shutdown of the PBG groundwater pump-and-treat systems was implemented in December 2012 at the source area.

BAAP-001: The settling ponds area final remedy will be soil excavation and removal, with state approval expected in summer 2013.

BAAP-40: Gruber's Grove Bay requires additional sediment treatment, based on WDNR review of remaining sediments after dredging. Remedial design (RD) is underway, with treatment planned in 2014.

BAAP-35: Long-term maintenance of caps on closed sites and landfills, with required groundwater monitoring, is expected to continue.

Parcel Summary

Summary of Parcel Prioritization and Transfer Strategy

Parcel Name: Parcel A

Parcel Size: 89.00

Associated Sites: BAAP-012

Transfer Date: 200409

Current Land Use: Agricultural

Future Land Use: Agricultural

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel B

Parcel Size: 55.36

Associated Sites: BAAP-012

Transfer Date: 200409

Current Land Use: Agricultural

Future Land Use: Agricultural

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel C

Parcel Size: 114.22

Associated Sites: BAAP-001, BAAP-012

Transfer Date: 200409

Current Land Use: Agricultural

Future Land Use: Agricultural

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel D

Parcel Size: 1,670.51

Associated Sites: BAAP-012, BAAP-33

Transfer Date: 200409

Current Land Use: Agricultural

Future Land Use: Agricultural

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel DOT

Parcel Size: 60.21

Associated Sites: BAAP-001, BAAP-012

Transfer Date: 201109

Current Land Use: Other (US Highway 78 right of way)

Future Land Use: Other (Hwy 78)

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: State of Wisconsin Department of Transportation

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel E

Parcel Size: 11.98

Associated Sites: BAAP-012

Transfer Date: 200409

Current Land Use: Agricultural

Future Land Use: Agricultural

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel F

Parcel Size: 20.19

Associated Sites: BAAP-012, BAAP-33

Transfer Date: 200409

Current Land Use: Agricultural

Future Land Use: Agricultural

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel G

Parcel Size: 45.10

Associated Sites:

Transfer Date: 200507

Current Land Use: Agricultural

Future Land Use: Agricultural

Encumbrances: none

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel H

Parcel Size: 44.60

Associated Sites: BAAP-012, BAAP-35, BAAP-43, BAAP-33

Transfer Date: 201409

Current Land Use: Other (storage & explosive decontamination of metal equip)

Future Land Use: Agricultural

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: USDA Dairy Forage Research Center

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel H1**Parcel Size:** 29.06**Associated Sites:** BAAP-012, BAAP-43**Transfer Date:** 201409**Current Land Use:** Other (storage of explosive items awaiting decon)**Future Land Use:** Agricultural**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Transfer to Other Federal Agencies**Recipient Organization:** USDA Dairy Forage Research Center**Other Issues Affecting Transfer:**N/A**Parcel Name:** Parcel I**Parcel Size:** 16.85**Associated Sites:****Transfer Date:** 200509**Current Land Use:** Other (Closed landfill)**Future Land Use:** Other (closed landfill/wildlife area)**Encumbrances:** none**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Transfer to Other Federal Agencies**Recipient Organization:** USDA Dairy Forage Research Center**Other Issues Affecting Transfer:**N/A**Parcel Name:** Parcel J**Parcel Size:** 9.91**Associated Sites:** BAAP-012**Transfer Date:** 201103**Current Land Use:** Other (disposal of inert materials)**Future Land Use:** Other (wildlife area)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Transfer to Other Federal Agencies**Recipient Organization:** USDA Dairy Forage Research Center**Other Issues Affecting Transfer:**N/A

Parcel Summary

Parcel Name: Parcel K

Parcel Size: 1,168.42

Associated Sites: BAAP-012

Transfer Date: 201005

Current Land Use: Other (wildlife, agriculture, clay & sand borrow)

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel K1

Parcel Size: 12.30

Associated Sites: BAAP-012, BAAP-35

Transfer Date: 201005

Current Land Use: Other (closed landfill/wildlife)

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel K2

Parcel Size: 17.29

Associated Sites: BAAP-012, BAAP-35

Transfer Date: 201005

Current Land Use: Other (closed remediation site with long term maintenance)

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel K3**Parcel Size:** 1.14**Associated Sites:****Transfer Date:** 201005**Current Land Use:** Other (wildlife area)**Future Land Use:** Other (park land)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to WDNR**Other Issues Affecting Transfer:**N/A**Parcel Name:** Parcel K4**Parcel Size:** 54.95**Associated Sites:****Transfer Date:** 201309**Current Land Use:** Other (inactive propellant manufacturing area)**Future Land Use:** Other (park land)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Transfer to Other Federal Agencies**Recipient Organization:** National Park passthrough to WI Dept of Natl Resou**Other Issues Affecting Transfer:**Originally approved by BIA for HCN. BIA declined Aug2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.**Parcel Name:** Parcel L**Parcel Size:** 199.38**Associated Sites:** BAAP-012**Transfer Date:** 201005**Current Land Use:** Other (agriculture, wildlife area)**Future Land Use:** Other (park land)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to WDNR**Other Issues Affecting Transfer:**N/A

Parcel Summary

Parcel Name: Parcel M

Parcel Size: 385.31

Associated Sites: BAAP-012

Transfer Date: 201005

Current Land Use: Other (wildlife area)

Future Land Use: Other (park land)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel M1

Parcel Size: 160.60

Associated Sites: BAAP-001, BAAP-012

Transfer Date: 201409

Current Land Use: Other (wildlife area, remediation area)

Future Land Use: Other (park land)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel M2

Parcel Size: 17.97

Associated Sites: BAAP-012

Transfer Date: 201005

Current Land Use: Other (monofill for dredging sediments)

Future Land Use: Other (closed monofill/ park land)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel M3

Parcel Size: 1.00

Associated Sites:

Transfer Date: 201409

Current Land Use: Other (inactive cemetery maintained by Army)

Future Land Use: Other (active cemetery operated by cemetery association)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Sale

Recipient Organization: Town of Sumpter

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel N

Parcel Size: 4.56

Associated Sites:

Transfer Date: 201005

Current Land Use: Other (inactive water pumping station)

Future Land Use: Other (park land)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel O

Parcel Size: 332.17

Associated Sites: BAAP-012

Transfer Date: 201409

Current Land Use: Other (wild life area)

Future Land Use: Other (buffalo grazing, cultural activities)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel O1**Parcel Size:** 3.89**Associated Sites:****Transfer Date:** 201409**Current Land Use:** Other (inactive water filtration plant)**Future Land Use:** Other (buffalo grazing, cultural activities)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Transfer to Other Federal Agencies**Recipient Organization:** National Park Service passthrough to WDNR**Other Issues Affecting Transfer:**Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.**Parcel Name:** Parcel O2**Parcel Size:** .03**Associated Sites:****Transfer Date:** 201409**Current Land Use:** Other (inactive cemetery maintained by Army)**Future Land Use:** Other (cemetery operated by cemetery association)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Sale**Recipient Organization:** Town of Sumpter**Other Issues Affecting Transfer:**N/A**Parcel Name:** Parcel O3**Parcel Size:** 12.85**Associated Sites:** BAAP-012**Transfer Date:** 201312**Current Land Use:** Other (rocket motor static firing)**Future Land Use:** Other (buffalo grazing & cultural activities)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Transfer to Other Federal Agencies**Recipient Organization:** National Park passthrough to WI Dept of Natl Resou**Other Issues Affecting Transfer:**Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Summary

Parcel Name: Parcel O4

Parcel Size: 10.35

Associated Sites:

Transfer Date: 201309

Current Land Use: Other (inactive propellant production area)

Future Land Use: Other (buffalo grazing and cultural activities)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: National Park passthrough to WI Dept of Natl Resou

Other Issues Affecting Transfer:Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel O5

Parcel Size: 14.41

Associated Sites:

Transfer Date: 201309

Current Land Use: Other (inactive propellant test area)

Future Land Use: Other (buffalo grazing and cultural activities)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: Nat'l Park Svc passthrough to WI Dpt Natl Resource

Other Issues Affecting Transfer:Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel O6

Parcel Size: 2.56

Associated Sites:

Transfer Date: 201409

Current Land Use: Other (inactive cemetery maintained by Army)

Future Land Use: Other (active cemetery operated by cemetery association)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Sale

Recipient Organization: Town of Sumpter

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel O7**Parcel Size:** 33.00**Associated Sites:****Transfer Date:** 201309**Current Land Use:** Other (inactive propellant manufacturing area)**Future Land Use:** Other (buffalo grazing and cultural activities)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** Nat'l Park Svc passthrough to WI Dept of Nat'l Rsc**Other Issues Affecting Transfer:**Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.**Parcel Name:** Parcel P1**Parcel Size:** 68.14**Associated Sites:** BAAP-012, BAAP-43**Transfer Date:** 201309**Current Land Use:** Other (inactive propellant production support area)**Future Land Use:** Other (buffalo grazing and cultural activities)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** Nat'l Park Svc passthru to WI Dept Natrl Resources**Other Issues Affecting Transfer:**Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.**Parcel Name:** Parcel P2**Parcel Size:** 161.64**Associated Sites:** BAAP-012**Transfer Date:** 201104**Current Land Use:** Other (inactive propellant manufacturing area)**Future Land Use:** Other (buffalo raising and cultural activities)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to Wisconsin DNR**Other Issues Affecting Transfer:**N/A

Parcel Summary

Parcel Name: Parcel P3**Parcel Size:** 30.25**Associated Sites:** BAAP-012**Transfer Date:** 201309**Current Land Use:** Other (inactive nitroglycerine production area)**Future Land Use:** Other (park land)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to Wisconsin DNR**Other Issues Affecting Transfer:**N/A**Parcel Name:** Parcel P4**Parcel Size:** 47.13**Associated Sites:** BAAP-012**Transfer Date:** 201312**Current Land Use:** Other (grazing and wildlife)**Future Land Use:** Other (park land)**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to Wisconsin DNR**Other Issues Affecting Transfer:**N/A**Parcel Name:** Parcel P5**Parcel Size:** 78.32**Associated Sites:** BAAP-012**Transfer Date:** 201104**Current Land Use:** N/A**Future Land Use:** N/A**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to Wisconsin DNR**Other Issues Affecting Transfer:**N/A

Parcel Summary

Parcel Name: Parcel P6

Parcel Size: 43.25

Associated Sites: BAAP-43

Transfer Date: 201104

Current Land Use: N/A

Future Land Use: N/A

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel Q1

Parcel Size: 43.52

Associated Sites:

Transfer Date: 201312

Current Land Use: N/A

Future Land Use: N/A

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel Q2

Parcel Size: 145.56

Associated Sites:

Transfer Date: 201312

Current Land Use: N/A

Future Land Use: N/A

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Summary

Parcel Name: Parcel Q3

Parcel Size: 239.22

Associated Sites: BAAP-012

Transfer Date: 201309

Current Land Use: N/A

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel R

Parcel Size: 93.68

Associated Sites: BAAP-012, BAAP-43

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel R1

Parcel Size: 14.11

Associated Sites: BAAP-012, BAAP-43

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Summary

Parcel Name: Parcel R2

Parcel Size: 1.01

Associated Sites:

Transfer Date: 201202

Current Land Use: Other (Drinking water well)

Future Land Use: Other (Drinking water well)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: US HHS passthrough to Bluffview Sanitary District

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel R3

Parcel Size: 35.75

Associated Sites: BAAP-43, CC-BAAP-44

Transfer Date: 201309

Current Land Use: Commercial

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel R4

Parcel Size: 29.01

Associated Sites:

Transfer Date: 201209

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel S1

Parcel Size: 35.40

Associated Sites: BAAP-43, CC-BAAP-44

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel S2

Parcel Size: 87.48

Associated Sites:

Transfer Date: 201109

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel S3

Parcel Size: 39.67

Associated Sites: BAAP-012, BAAP-43, CC-BAAP-44

Transfer Date: 201209

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel S4

Parcel Size: 9.83

Associated Sites:

Transfer Date: 201312

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel S5

Parcel Size: 15.71

Associated Sites: BAAP-43

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel T

Parcel Size: 15.44

Associated Sites: BAAP-012

Transfer Date: 201202

Current Land Use: Industrial

Future Land Use: Industrial

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: US HHS passthrough to Bluffview Sanitary District

Other Issues Affecting Transfer: N/A

Parcel Summary

Parcel Name: Parcel T1**Parcel Size:** 147.41**Associated Sites:** BAAP-001, BAAP-012, BAAP-33**Transfer Date:** 201309**Current Land Use:** Industrial**Future Land Use:** N/A**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** US HHS passthrough to Bluffview Sanitary District**Other Issues Affecting Transfer:**N/A**Parcel Name:** Parcel U2**Parcel Size:** 100.43**Associated Sites:** BAAP-012**Transfer Date:** 201312**Current Land Use:** Recreational**Future Land Use:** Recreational**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to WDNR**Other Issues Affecting Transfer:**Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.**Parcel Name:** Parcel U3**Parcel Size:** 130.72**Associated Sites:****Transfer Date:** 201309**Current Land Use:** Recreational**Future Land Use:** Recreational**Encumbrances:** N/A**Leases/Permits/Licenses:** N/A**Transfer Strategy:** Public Benefit Conveyance (PBC)**Recipient Organization:** National Park Service passthrough to WDNR**Other Issues Affecting Transfer:**Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Summary

Parcel Name: Parcel V

Parcel Size: 291.15

Associated Sites: BAAP-012

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel V1

Parcel Size: 96.08

Associated Sites: BAAP-012, BAAP-35

Transfer Date: 201409

Current Land Use: Other (active permitted demolition landfill)

Future Land Use: Other (inactive, capped landfill)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel V2

Parcel Size: 22.15

Associated Sites:

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Summary

Parcel Name: Parcel V3

Parcel Size: 342.03

Associated Sites:

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel W

Parcel Size: 47.39

Associated Sites: BAAP-012

Transfer Date: 201005

Current Land Use: Other (restored prairie)

Future Land Use: Other (restored prairie)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:N/A

Parcel Name: Parcel X1

Parcel Size: 58.33

Associated Sites:

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Transfer to Other Federal Agencies

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer:Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Summary

Parcel Name: Parcel X2

Parcel Size: 42.37

Associated Sites: BAAP-43

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel X3

Parcel Size: 36.95

Associated Sites: BAAP-43

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Name: Parcel Y

Parcel Size: 68.15

Associated Sites: BAAP-43

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Other (park land)

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

Parcel Summary

Parcel Name: Parcel Y1

Parcel Size: 32.87

Associated Sites: BAAP-43

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to Wisconsin DNR

Other Issues Affecting Transfer: N/A

Parcel Name: Parcel Y2

Parcel Size: 24.32

Associated Sites: BAAP-43, CC-BAAP-44

Transfer Date: 201309

Current Land Use: Recreational

Future Land Use: Recreational

Encumbrances: N/A

Leases/Permits/Licenses: N/A

Transfer Strategy: Public Benefit Conveyance (PBC)

Recipient Organization: National Park Service passthrough to WDNR

Other Issues Affecting Transfer: Originally approved by BIA for Ho-Chunk Nation. BIA declined August 2011. HCN trying to change that decision. GSA offered to WDNR Feb. 29, 2012.

BADGER ARMY AMMUNITION PLANT
Non-BRAC Excess
Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 37/31

Installation Site Types with Future and/or Underway Phases

- 1 Burn Area
(BAAP-33)
- 2 Contaminated Ground Water
(BAAP-012, BAAP-43)
- 1 Contaminated Sediments
(BAAP-40)
- 1 Landfill
(BAAP-35)
- 1 Surface Impoundment/Lagoon
(BAAP-001)

Most Widespread Contaminants of Concern

Explosives, Metals, Petroleum, Oil and Lubricants (POL), Polychlorinated Biphenyls (PCB), Volatiles (VOC)

Media of Concern

Groundwater, Sediment, Soil

Completed Remedial Actions (Interim Remedial Actions / Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY	Cost
BAAP-010	NEW ACID AREA	IRA	CAPPING	1987	TBD
BAAP-004	EXISTING LANDFILL (LANDFILL #5)	IRA	CAPPING	1990	TBD
BAAP-34	PROP BRNG GRD - THERM TRTMT UNT/RACETRCK	FRA	WASTE REMOVAL - SOILS	1995	TBD
BAAP-005	NITROGLYCERINE Pond	FRA	DRAINAGE CONTROLS	1996	\$143.3 K
BAAP-33	PROP BRNG GRD - CONTAMINATED WASTE PITS	FRA	GROUND WATER TREATMENT	1997	TBD
BAAP-33	PROP BRNG GRD - CONTAMINATED WASTE PITS	IRA	GROUND WATER TREATMENT	1997	TBD
BAAP-38	TRANSFORMER YARD - PCB IN SOIL	FRA	WASTE REMOVAL - SOILS	1997	TBD
BAAP-34	PROP BRNG GRD - THERM TRTMT UNT/RACETRCK	FRA	WASTE REMOVAL - SOILS	1998	\$6.0 K
BAAP-34	PROP BRNG GRD - THERM TRTMT UNT/RACETRCK	FRA	NATURAL ATTENUATION	1998	TBD
BAAP-35	CAP & COVER MAINTENANCE	FRA	CAPPING	1998	\$962.9 K
BAAP-35	CAP & COVER MAINTENANCE	FRA	CAPPING	1998	\$469.5 K
BAAP-37	POWERHOUSE # 1 SOIL OLD FUEL SPILLS	FRA	FREE PRODUCT RECOVERY	1998	TBD
BAAP-35	CAP & COVER MAINTENANCE	FRA	CAPPING	1999	TBD
BAAP-33	PROP BRNG GRD - CONTAMINATED WASTE PITS	FRA	WASTE REMOVAL - SOILS	2000	TBD
BAAP-37	POWERHOUSE # 1 SOIL OLD FUEL SPILLS	FRA	BIOVENTING	2000	TBD
BAAP-005	NITROGLYCERINE Pond	FRA	WASTE REMOVAL - SOILS	2001	TBD
BAAP-006	DETERRENT BURNING GROUND	IRA	WASTE REMOVAL - SOILS	2001	TBD

IRP Summary

Completed Remedial Actions (Interim Remedial Actions / Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY	Cost
BAAP-006	DETERRENT BURNING GROUND	FRA	CAPPING	2003	\$1,475.0 K
BAAP-008	ROCKET PASTE AREA	FRA	WASTE REMOVAL - SOILS	2003	\$55.0 K
BAAP-36	EAST & WEST ROCKET AREA DITCHES	FRA	WASTE REMOVAL - SOILS	2003	\$40.0 K
BAAP-006	DETERRENT BURNING GROUND	FRA	BIOREMEDIATION - IN SITU	2004	\$525.0 K
BAAP-009	OLD ACID AREA	IRA	FUGITIVE DUST COVER/CONTROL	2005	TBD
BAAP-37	POWERHOUSE # 1 SOIL OLD FUEL SPILLS	FRA	REMOVAL	2006	TBD
BAAP-33	PROP BRNG GRD - CONTAMINATED WASTE PITS	FRA	BIOREMEDIATION - IN SITU	2007	TBD
BAAP-40	GRUBER'S GROVE BAY	IRA	REMOVAL	2007	TBD
BAAP-42	Box Wash Accounts 1890-1&2	FRA	WASTE REMOVAL - SOILS	2007	\$191.0 K
BAAP-001	SETTLING PONDS/SPOILS DISPOSAL AREA	IRA	WASTE REMOVAL - SOILS	2008	TBD
BAAP-009	OLD ACID AREA	FRA	WASTE REMOVAL - SOILS	2008	TBD
BAAP-33	PROP BRNG GRD - CONTAMINATED WASTE PITS	FRA	OTHER	2008	TBD
BAAP-001	SETTLING PONDS/SPOILS DISPOSAL AREA	IRA	WASTE REMOVAL - SOILS	2009	TBD
BAAP-33	PROP BRNG GRD - CONTAMINATED WASTE PITS	FRA	CAPPING	2009	TBD
BAAP-012	GW Monitoring ON and OFF Post	IRA	ALTERNATE WATER SUPPLY/WATER SUPPLY TREATMENT	2012	TBD

Duration of IRP

Year of IRP Inception: 197701

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201512/202009

Date of IRP completion including Long Term Management (LTM): 205403

IRP Contamination Assessment

Contamination Assessment Overview

In the 1940s, the US government acquired more than 10,000 acres to construct BAAP. In 1942, the construction of the propellant plant began on farmland composed of topsoil (up to 10 feet of clay silt loess) over very permeable sand and gravel deposits. The installation was the largest propellant manufacturing plant constructed in World War II. It also made propellants for the Korean and Vietnam conflicts. Active propellant manufacturing ceased in 1976.

Studies conducted during the late-1970s and early-1980s discovered materials such as propellant grains, dinitrotoluene (DNT), nitroglycerine, organic solvents, lead compounds and acids, used during production were potential soil and groundwater contaminants. In 1987, a preliminary assessment (PA) and site inspection (SI) were conducted and documented in the Master Environmental Plan. Some volatile organic compounds (VOC), such as the solvent carbon tetrachloride, had migrated through the soil to the groundwater located 90 to 110 feet (ft) below ground surface. The contaminants then moved with the groundwater, which generally flows to the south.

Contaminants have been found in soil at varying depths as well as in groundwater. Contamination from production discharge water also has been identified in the bottom sediments of now-dry, man-made settling ponds. This discharge also emptied into the waters of Lake Wisconsin at Gruber's Grove Bay.

In September 1987, based on information developed during the PA, the WDNR issued an in-field condition report (IFCR) for BAAP. The IFCR contained requirements to conduct an RI/FS for specified sites on the installation. Over the years the IFCR has been modified by the state as necessary, under their Resource Conservation and Recovery Act (RCRA) authority from USEPA, to keep it current and address the latest findings and decisions regarding the installation cleanup program.

In 1988, the installation also received a hazardous waste operations and storage license in accordance with the RCRA Part B permit process. Issued jointly by the USEPA Region V and the WDNR, it included specific requirements for an investigation at each of the potentially contaminated sites previously identified. It also provided for a phased study program based on a prioritized ranking. This license was renewed in 1998 for storage only and was no longer needed in 2003 when the storage facility was closed.

BAAP was nominated for the NPL, but was not listed. The remediation program is proceeding under the RCRA authority delegated by USEPA to the state in 1994, but the terminology used follows the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The WDNR regulates the Army's remedial efforts. The USEPA involvement continues only in an advisory/assistance role.

Over the years the IFCR identified sites have been investigated and remediated. Additional problems found during the demolition and investigation of the production areas have been addressed. There are two capped disposal areas (DPG and PBG) where residuals chemicals remain and groundwater contamination has moved away from these sites as distinct plumes. A third plume has been identified, but no specific site was identified. All the plumes appear to be stable or decreasing through natural attenuation. The maintenance of the source caps and the monitoring of groundwater conditions will continue for many years.

Four home wells found to be significantly impacted by the PBG plume were replaced in the 1990s. Two other homes found to be significantly impacted by the third plume were replaced in the 2000s. A public water system is proposed by the Army as part of the final remedy for the problem, to provide reliable clean water to all residences in the potential area of impact from the three plumes.

Cleanup Exit Strategy

Building demolition, asbestos and explosive safety certifications, followed by soil sampling is proceeding in the last few parcels and is expected to be completed in FY2013. Shut down of the groundwater pump-and-treat systems started in December 2012 and will proceed if no negative impacts are found. The on-site demolition waste landfill will be closed and capped in 2013. Transfers of the remaining parcels out of Army control, achieving no further action (NFA) status in Gruber's Grove Bay, installing a municipal water system to prevent human exposure to impacted groundwater, and monitoring natural attenuation and capped sites to meet long term state requirements will be done in the coming years.

IRP Previous Studies

	Title	Author	Date
1973	Air Pollution Engineering General Survey NO. 21-001-74	US Army Environmental Hygiene Agency	OCT-1973
1977	Installation Assessment of BAAP	Installation	MAY-1977
1978	Water Quality Special Study No. 24-0039-78	Installation	MAR-1978
1980	Closure Plan, Deterrent Burning Grounds, BAAP	Installation	MAY-1980
	Preliminary Environmental Survey, BAAP	Installation	MAY-1980
1981	BAAAP Contamination Survey, Final Report	Installation	MAR-1981
1983	Environmental Assessment for Total Plant Operation BAAP	Installation	MAY-1983
1984	Near-Surface Soils Investigations at BAAP	Installation	OCT-1984
1985	Investigation Report for Soil Sampling, Analysis and Evaluation of Settling Ponds Spoils Site at BAAP	Installation	SEP-1985
1987	CLOSURE DOCUMENTATION APPROVAL, NEUTRALIZATION/STABILIZATION POND, NEW ACID COMPLEX (CD)	Wisconsin Department of Natural Resources	JUL-1987
1988	Geophysical Investigation At An Existing Landfill, BAAP	Installation	MAY-1988
1989	WDNR LETTER, CLOSURE DOCUMENTATION APPROVAL, BADGER ARMY AMMUNITION PLANT LANDFILL (#2813), SAUK CO. (CD)	Wisconsin Department of Natural Resources	SEP-1989
1990	High Capacity Well Survey Report (Recommends Locations For 5 Off-Plant Monitoring Wells)	Installation	JUN-1990
	An Investigation of Cancer Mortality for Communities near the BAAP	Installation	JUL-1990
	Environmental Assessment for Removal of Barricades	Installation	SEP-1990
	Health Assessment BAAP	Installation	SEP-1990
	Graf Well Results with Suspect Metatrace	Installation	OCT-1990
	Graf Well Results without Metatrace Data	Installation	OCT-1990
	Environmental Assessment for Layaway of Contaminated Waste Processor	Installation	OCT-1990
1991	Geophysical Investigation at an Existing Landfill, BAAP	Installation	APR-1991
	Receiving Water Biological Study No. 32-24-0025-91, Effluent Toxicity Testing, BAAP	Installation	MAY-1991

IRP Previous Studies

	Title	Author	Date
1991	Environmental Assessment and Finding of No Significant Impact for Agricultural Leasing: Fertilization Policy Change	Installation	JUN-1991
	Finding Of No Significant Impact For Prove-out - Nitric Acid/Sulfuric Acid Concentrator (NAC/SAC) Facilities At BAAP	Installation	JUN-1991
	Dinitrotoluene in Deer Tissues Final Report	Installation	SEP-1991
1992			
	2,4 And 2,6 Dinitrotoluene Health Advisory	Installation	APR-1992
1993			
	Gruber's Grove Bay Investigation Summary	Installation	FEB-1993
	Groundwater Narrative Historical Summary Report - Badger AAP Volumes I, II and III	Installation	MAR-1993
	Leachability of Selected Chemical Elements from Concrete	Installation	MAR-1993
	Final Remedial Investigation Report, Volumes I and II, Appendices A Through R	Installation	APR-1993
	BAAP Monitoring Well Results - Volumes I, II, and III	Installation	JUN-1993
	BAAP Groundwater Tests - Private Wells	Installation	SEP-1993
	WDNR LETTER, CLOSURE OF 18,000-GALLON FUEL OIL TANK (CD)	Wisconsin Department of Natural Resources	SEP-1993
1994			
	Groundwater Narrative Historical Summary Report - Volumes I, II, and III	Installation	MAY-1994
	Badger Army Ammunition Plant Groundwater Hydrology	Installation	MAY-1994
	BAAP Groundwater Private Well Test Results	Installation	SEP-1994
1995			
	BAAP Groundwater Hydrology	Installation	MAY-1995
	Natural Attenuation Study for Racetrack Area Soil	Installation	OCT-1995
1996			
	Delineation of Subsurface Soil Impacts at Refuse Pits Located At The South End Of The PBG	Installation	JAN-1996
	Health Risk Assessment - Heavy Metal Uptake in Terrestrial Insects - Specifications, Design Analysis	Installation	FEB-1996
	Racetrack Area Waste Pile Delineation/Characterization - Final Remedial Investigation Report	Installation	JUL-1996
	CLOSURE DOCUMENTATION OF THE HAZARDOUS WASTE THERMAL TREATMENT UNIT IN THE PROPELLANT BURNING GROUND AT BADGER (CD)	Wisconsin Department of Natural Resources	SEP-1996
	Small Mammal Survey	Installation	NOV-1996
	Infrastructure Remedial Environmental Study	Installation	DEC-1996
1997			
	MIRM Vapor Phase Carbon Adsorption Report	Installation	FEB-1997
	Bench Scale Soil Washing Treatability Study	Installation	MAY-1997
	Northeast Boundary Area Groundwater Study	Installation	MAY-1997
	Evaluation of Groundwater Conditions - Deterrent	Installation	MAY-1997

IRP Previous Studies

	Title	Author	Date
1997	Burning Grounds		
	Deterrent Burning Ground Subsurface Investigation	Installation	DEC-1997
	FINAL RI REPORT, RACETRACK AREA WASTE PILE DELINEATION/CHARACTERIZATION & DATA REPORT-DELINEATION OF SUBSURFACE SOIL (CD)	Wisconsin Department of Natural Resources	DEC-1997
1998	Alternative Feasibility Study Soil, Sediment, and Surface Water Nitroglycerine, Rocket Paste, and Overflow Ponds	Installation	APR-1998
	BAAP Groundwater Hydrology Report	Installation	JUN-1998
	Alternative Feasibility Study (FS) for the DBG and PBG Waste Pits Subsurface Soil at BAAP	Installation	JUL-1998
1999	REPORT ON GAS & DIESEL TANK REMOVAL DONE IN 1998 & WDNR LETTER, NO FURTHER ACTION ON GAS & DIESEL TANKS PER NR 708, WIS. ADM. CODE (CD)	Ramaker & Associates, Inc. & Wisconsin Department of Natural Resources	JAN-1999
	Corrective Measures Implementation Report Nitroglycerine, Overflow, And Rocket Paste Ponds	Installation	JAN-1999
	Plexus Scientific Environmental Baseline Survey	Installation	JAN-1999
	Corrective Measures Implementation Report Rocket Ditches Area BAAP	Installation	JAN-1999
	REPORT ON GAS & DIESEL TANK REMOVAL DONE IN 1998 & WDNR LETTER, NO FURTHER ACTION ON GAS & DIESEL TANKS PER NR 708, WIS. ADM. CODE (CD)	Ramaker & Associates, Inc. & Wisconsin Department of Natural Resources	MAR-1999
	1949 PIT CLOSURE (CD)	Wisconsin Department of Natural Resources	MAR-1999
	Badger Army Ammunition Plant Independent Technical Review Final Recommendations Report	Installation	MAY-1999
	BAAP Monitoring Well Results	Installation	MAY-1999
	Technical Report Natural Attenuation Screening Study Propellant Burning Ground	Installation	AUG-1999
2000	BAAP Groundwater Program Private Well Results	Installation	MAR-2000
	2000 Groundwater Narrative Summary Report	Installation	MAY-2000
	WDNR LETTER, CLOSURE OF THE NG POND, THE ROCKET PASTE POND & ROCKET DITCHES (CD)	Wisconsin Department of Natural Resources	JUL-2000
2001	Gruber's Grove Bay Dredging Project Lake Wisconsin, Sauk County	Installation	JAN-2001
	Badger AAP Monitoring Well Results	Installation	MAR-2001
2002	USDA Evaluation of Suspect Soil At Fence Lines And Railroad Track, Badger Army Ammunition Plant	Installation	FEB-2002
	WDNR LETTER, BALLISTICS POND (CD)	Wisconsin Department of Natural Resources	APR-2002
	WDNR LETTER, OLEUM PLANT LANDFILL, BADGER ARMY AMMUNITION PLANT, SAUK COUNTY (CD)	Wisconsin Department of Natural Resources	APR-2002
	FINAL DETERMINATION OF REMEDY FOR THE	Wisconsin Department of	OCT-2002

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	Title	Author	Date
2002	DETERRENT BURNING GROUND (CD)	Natural Resources	
2003	USDA Summary of Soil Sampling Activities - USDA/Badger Army Ammunition Plant	Installation	JAN-2003
	2003 Groundwater Narrative Summary Report	Installation	MAR-2003
	FUDS SITES (CD)	Wisconsin Department of Natural Resources	NOV-2003
2004	2004 Groundwater Narrative Summary	Installation	JAN-2004
	Badger Army Ammunition Plant Environmental Site Assessment	Installation	DEC-2004
2005	WDNR LETTER, NO ACTION REQUIRED, BALLISTICS DITCHES (CD)	Wisconsin Department of Natural Resources	JAN-2005
	Groundwater Narrative Summary Report	SpecPro	JAN-2005
	WDNR LETTER, OLEUM POND (CD)	Wisconsin Department of Natural Resources	MAR-2005
	Final Report on Residual Dinitrotoluenes in Settling Ponds and Spoils Disposal Area Soils at BAAP: Microcosm and Soil Column Studies	Georgia Institute of Technology	JUN-2005
2006	March 2006 Groundwater Cert. & Exceedance Reports, All Hits Report, Sampled Wells List, & Sampled Wells By Frequency Map (CD)	Department of the Army/Specpro, Inc.	MAR-2006
	Bench Scale Study Report, Verification of Field Test Methods for NC & NG - Spiked Samples of Soil & Building Materials (Rev. 1)	Shaw Environmental, Inc.	APR-2006
	Draft Report, Ecological Risk Assessment Re- Evaluation, Settling Ponds & Spoils Disposal Areas Site, Badger AAP	Menzie-Cura & Associates, Inc./Specpro, Inc	APR-2006
	Site Assessment Report, Parcels K4, O, P3, And P5, Underground Storage Tank Investigation (CD)	Department of the Army/Specpro, Inc	APR-2006
	Dept. of the Army Letter Dated April 10, 2006, Subject: High Priority Review Request (CD)	Department of the Army/Specpro, Inc	APR-2006
	WDNR Letter, Landfill Closure Approvals	Wisconsin Department of Natural Resources	MAY-2006
	WDNR Letter, No Action Required For The Badger Army Ammunition Plant Rocket Paste Dep Storage Area	Wisconsin Department of Natural Resources	JUN-2006
	WDNR Letter, No Action Required For The Badger Army Ammunition Plant Solvent Recovery Area	Wisconsin Department of Natural Resources	JUN-2006
	WDNR Letter, No Action Required For The Badger Army Ammunition Plant Maintenance Shop, UST	Wisconsin Department of Natural Resources	JUN-2006
	WDNR Letter, No Action Required For The Badger Army Ammunition Plant Tram Repair Shop UST	Wisconsin Department of Natural Resources	JUN-2006
	WDNR Letter, No Action Required For The Badger Army Ammunition Plant Solvent Recovery Area USTs	Wisconsin Department of Natural Resources	JUN-2006
	WDNR Letter, No Action Required For The Badger Army Ammunition Plant Compressor House UST	Wisconsin Department of Natural Resources	JUN-2006
	WDNR Letter, No Action Required For The Badger Army Ammunition Plant Ball Powder Pilot Plant	Wisconsin Department of Natural Resources	JUN-2006
	WDNR Letter, No Action Required For The Badger Army	Wisconsin Department of	JUN-2006

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Title	Author	Date
Ammunition Plant Dep Unloading Station UST	Natural Resources	
2006 Groundwater Narrative Summary Report (CD)	Department of the Army/Specpro, Inc.	JUN-2006
June 2006 Groundwater Certifications And Exceedance Reports, All Hits Report, And Sampled Wells List (CD)	Department of the Army/Specpro, Inc.	JUN-2006
Site Assessment Report, Historic Shops Solvent Investigation - Phase 2, Follow-Up Remedial Investigation, Badger AAP (CD)	Department of the Army/Specpro, Inc.	JUN-2006
Site Assessment Report, Battery Charging Station, Underground Storage Tank Investigation, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	JUN-2006
Landfill 4 Closure Construction Documentation Report, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	JUN-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Oleum Ditch	Wisconsin Department of Natural Resources	JUN-2006
Explosive Safety Submission (CD)	Shaw Environmental, Inc./US Army Corps of Engineers	JUL-2006
Site Assessment Report, Parcel K UST Investigation, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	JUL-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Battery Charging Station USTs	Wisconsin Department of Natural Resources	JUL-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Parcel K (Oleum Area) UST	Wisconsin Department of Natural Resources	JUL-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Railroad Track Scale	Wisconsin Department of Natural Resources	JUL-2006
Site Assessment Report, Parcel O5 UST Investigation, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	JUL-2006
Site Assessment Report, Parcel O1 UST Investigation, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	JUL-2006
Phase 2 Site Assessment & Remediation Report, Parcel V UST Investigation, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	JUL-2006
Draft Corrective Measures Implementation Rpt, Asbestos Abatement, Demo, & Disposal, East/West Paste & Ball Powder Areas (CD)	Shaw Environmental, Inc.	AUG-2006
WDNR Landfill Closure Approval Letter, Landfill 4 Soil Cover Project Report	Wisconsin Department of Natural Resources	AUG-2006
Aug UST 2006 Groundwater Certification And Exceedance Report, All Hits Report, And Sampled Wells List, & Sampled Wells Maps (CD)	Department of the Army/Specpro, Inc.	AUG-2006
Remediation Summary Report, Powerhouse #1 Fuel Oil Remediation, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	AUG-2006
Site Assessment Report, Parcels D And T Former Underground Storage Tanks Investigation (CD)	Department of the Army/Specpro, Inc.	SEP-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Parcel O5 (Cannon Range) USTs	Wisconsin Department of Natural Resources	SEP-2006
Final Amendment 5 Explosive Safety Submission (ESS) For Building Demolition, Badger Army Ammunition Plant (CD),	Shaw Environmental, Inc./US Army Corps of Engineers	SEP-2006
September 2006 Groundwater Certifications And Exceedance Reports, All Hits Report, And Sampled Wells List (CD)	Department of the Army/Specpro, Inc.	SEP-2006

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Title	Author	Date
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Historic Shops Solvent Investigation	Wisconsin Department of Natural Resources	SEP-2006
Final Amendment 6 Explosive Safety Submission (ESS) For Building Demolition, Badger Army Ammunition Plant (CD)	Shaw Environmental, Inc./US Army Corps of Engineers	SEP-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Powerhouse #2 Fuel Oil USTs	Wisconsin Department of Natural Resources	SEP-2006
Health Consultation, Dinitrotoluene In Private Wells, Badger Army Ammunition Plant, Baraboo, Sauk County, Wisconsin (CD)	US Department of Health and Human Services	SEP-2006
Site Assessment Report, Gasoline Storage Area, Follow-Up Remedial Investigation Phase 2, Badger AAP (CD)	Department of the Army/Specpro, Inc	OCT-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Magazine Office USTs	Wisconsin Department of Natural Resources	OCT-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Raw Material Store USTs	Wisconsin Department of Natural Resources	OCT-2006
October 2006 Groundwater Certifications And Exceedance Reports, All Hits Report, Sampled Wells List, & Sampled Wells Map (CD)	Department of the Army/Specpro, Inc.	OCT-2006
Site Assessment Report, Old Acid Area Solvent Investigation, Follow-Up Remedial Investigation, Badger AAP (CD)	Department of the Army/Specpro, Inc	OCT-2006
RAB Minutes: February 6, 2006; June 5, 2006; August 14, 2006; And October 16, 2006 (CD)	Department of the Army/Specpro, Inc.	NOV-2006
Final Addendum, Field Sampling Plan, Gruber's Grove Bay Dredging Project (CD)	Shaw Environmental, Inc./US Army Corps of Engineers	NOV-2006
Construction Documentation Report, Phase 2 Liner Construction, Expansion Of Landfill 03646 (CD)	Department of the Army/Specpro, Inc.	NOV-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Contaminated Waste Processing Building UST (On CD)	Wisconsin Department of Natural Resources	NOV-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Old Acid Air Compressor House UST (On CD)	Wisconsin Department of Natural Resources	NOV-2006
WDNR Letter, Site Closure Approval For The Badger Army Ammunition Plant Filtration Plant USTs (On CD)	Wisconsin Department of Natural Resources	NOV-2006
WDNR Letter, No Action Required For The Badger Army Ammunition Plant Emergency Generator House UST (On CD)	Wisconsin Department of Natural Resources	NOV-2006
Monitoring Results From Gruber's Grove Bay Cleanup (CD)	US Army Corps of Engineers	DEC-2006
Baseline Ecological Risk Assessment Work Plan, Settling Ponds & Spoils Disposal Areas Site, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc./Menzie-Cura & Associates, Inc.	DEC-2006

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Final Amendment 7 Explosive Safety Submission (ESS) For Building Demolition, Badger Army Ammunition Plant (CD)	Shaw Environmental, Inc./US Army Corps of Engineers	JAN-2007
Old Acid Area Remedial Action Plan, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	JAN-2007

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Title	Author	Date
Applied Innovative Technologies For Characterization Of Nc- And Ng-Contaminated Buildings, Badger Army Ammunition Plant (CD)	Shaw Environmental, Inc./US Army Corps of Engineers	JAN-2007
Restoration Advisory Board Meeting Minutes For January 10, 2007 (CD)	Department of the Army	JAN-2007
Inspiration Drive Area Groundwater Sampling Files	Specpro, Inc.	FEB-2007
March 2007 Groundwater Certifications, Exceedance Reports, All Hits Report, Sampled Wells List, Sampled Wells Map, Landfill Wells Sampled	Department of the Army/Specpro, Inc.	MAR-2007
P6 Nitroglycerin Area Investigation	Department of the Army/Specpro, Inc.,	MAR-2007
Best System Database (CD)	Shaw Environmental & Infrastructure, Inc	MAR-2007
Restoration Advisory Board Meeting Minutes for March 19, 2007	Department of the Army	MAR-2007
Residential Groundwater Test Results - March 2007, March 2007 and Master Summary Spreadsheets	Department of the Army	MAR-2007
Documentation Of Annual Maintenance Activities 2006, Closed Covered And Capped Sites, Badger Army Ammunition Plant (CD)	Department of the Army	MAR-2007
Gasoline Storage Area Shallow Soil Remediation Report, Badger Army Ammunition Plant (CD)	Department of the Army/Specpro, Inc.	MAR-2007
Old Acid Area Solvent Investigation Site Closeout Request; Brtrs Number 02-57-001002 (CD)	Department of the Army/Specpro, Inc.	MAR-2007
December 2006 Groundwater Certifications, Exceedance Reports, All Hits Reports, Sampled Wells List, Map, Residential Master List (CD)	Department of the Army/Specpro, Inc.	MAR-2007
Tractor Garage Underground Storage Tanks (USTs) Remediation Site Closeout Request; Brtrs Number 02-57-001002 (CD)	Department of the Army/Specpro, Inc.	MAR-2007
SURFACE WATER (WEIGAND'S BAY) SAMPLING WEST OF HWY 78 (CD)	SpecPro, Inc.	APR-2007
Department of the Army Letter Dated April 18, 2007, Subject: Old Acid Area Remedial Action Plan Modification	Department of the Army	APR-2007
Department of the Army Letter, Powerhouse # 1 Final Closure Fuel Oil Discharge Site, Badger Army Ammunition Plant	Department of the Army/Specpro, Inc.	MAY-2007
Department of the Army Letter, No Further Action Request Regarding Cemeteries At Badger Army Ammunition Plant	Department of the Army/Specpro, Inc.	MAY-2007
WDNR Letter, No Action Required for Three Cemeteries on Badger Army Ammunition Plant Property	Wisconsin Department of Natural Resources	MAY-2007
Dept. of the Army & Wisconsin Department of Natural Resources Letters (2) Regarding Dinitrotoluene Health Standards	Department of the Army/Wisconsin Department of Natural Resources	MAY-2007
WDNR Letter, Site Closure Approval for the Badger Army Ammunition Plant Gasoline Storage Area ASTs	Wisconsin Department of Natural Resources	MAY-2007
WDNR Letter, No Action Required Determination for the Badger Army Ammunition Plant Old Acid Area Solvent Investigation	Wisconsin Department of Natural Resources	MAY-2007
WDNR Letter, Site Closure Approval for the Badger Army Ammunition Plant Tractor Garage USTs	Wisconsin Department of Natural Resources	MAY-2007

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Title	Author	Date
WDNR Letter, No Action Required Determination for the Badger Army Ammunition Plant P6 Nitroglycerin Area Investigation	Wisconsin Department of Natural Resources	MAY-2007
WDNR Letter, Site Closure Approval for the Badger Army Ammunition Plant Tractor Garage USTs	Wisconsin Department of Natural Resources	MAY-2007
WDNR Letter, Site Closure Approval for the BAAP - Powerhouse #1 Fuel Oil Discharge Site; Sauk County; BRRTS Number 02-57-549430	Wisconsin Department of Natural Resources	JUN-2007
Residential Groundwater Test Results - June 2007, June 2007 and Master Summary Spreadsheets	Department of the Army	JUN-2007
June 2007 Groundwater Data Certifications, Exceedance Reports, All Hits Reports, Sampled Wells List, Sampled Wells Map	Department of the Army/Specpro, Inc.	JUN-2007
Restoration Advisory Board Meeting Minutes for June 18, 2007	Department of the Army	JUN-2007
2007 Groundwater Narrative Summary Report (CD)	Department of the Army/Specpro, Inc.	JUL-2007
Department of the Army Letter Dated July 16, 2007, Subject: No Further Action, Coal Yard, Badger Army Ammunition Plant	Department of the Army/Specpro, Inc.	JUL-2007
Remediation Summary Report, P4 Rocket Paste Ditch, Badger Army Ammunition Plant	Department of the Army/Specpro, Inc.	JUL-2007
Site Assessment Reports, Oil & Solvent Store, Follow-Up Remedial Investigations, Olin Corp. Phase 2 & Specpro, Inc. Phase 3	Department of the Army/Specpro, Inc.	AUG-2007
Construction Documentation Report, Phase 3 Liner Construction, Expansion of Landfill 03646	Department of the Army/Specpro, Inc.	AUG-2007
DNR Letter Dated August 20, 2007, Subject: No Further Action Request Former Coal Yard Storage Area	Wisconsin Department of Natural Resources	AUG-2007
Gruber's Grove Bay Draft Remedial Action Completion Report	Shawe Environmental, Inc.	AUG-2007
August 2007, Residential Sampling, GW Certification Form, Exceedance Report, All Hits Report, Sampled Wells Map & List, GW Test Results Table	Department of the Army/Specpro, Inc.	AUG-2007
Soil Remediation Summary Report, Box Wash Repair Site, Badger Army Ammunition Plant	Department of the Army/Specpro, Inc.	SEP-2007
Propellant Burning Ground September 2007 Explosives Groundwater Data	Department of the Army/Specpro, Inc.	SEP-2007
September 2007 Groundwater Data Certifications, Exceedance Reports, All Hits Reports, Sampled Wells List, Sampled Wells Map	Department of the Army/Specpro, Inc.	SEP-2007
Restoration Advisory Board Meeting Minutes for September 24, 2007	Department of the Army	SEP-2007
WDNR Letter Dated October 1, 2007, Subject: No Action Required for the Badger Army Ammunition Plant Oil & Solvent Store	Wisconsin Department of Natural Resources	OCT-2007
WDNR Letter Dated October 9, 2007, Subject: Phase 3 Liner Construction Documentation Approval for Landfill Site No. 03646	Wisconsin Department of Natural Resources	OCT-2007
WDNR Letter Dated October 24, 2007, Subject: Site Closure Approval for the BAAP - Box Wash Repair Site	Wisconsin Department of Natural Resources	OCT-2007
Final Amendment 8 Explosive Safety Submission (ESS) for Building Demolition, Badger Army Ammunition Plant	Shaw Environmental, Inc./US Army Corps of Engineers	NOV-2007

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Title	Author	Date
DECEMBER 2007 GROUNDWATER DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	DEC-2007
WDNR Letter Dated December 12, 2007, Subject: Site Closure Approval for the BAAP - P4 Rocket Paste Ditch Case	Wisconsin Department of Natural Resources	DEC-2007
Old Acid Area Remedial Action Report, Badger Army Ammunition Plant	Department of the Army/Specpro, Inc.	DEC-2007

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WDNR LETTER DATED JANUARY 30, 2008, SUBJECT: FINAL CASE CLOSURE FOR THE BAAP - OLD ACID AREA CASE (CD)	Wisconsin Department of Natural Resources	JAN-2008
RESTORATION ADVISORY BOARD MEETING MINUTES FOR JANUARY 9, 2008 (CD)	Department of the Army	JAN-2008
Draft Finding of Suitability To Transfer (FOST), Parcels K, K1, K2, K3, L, M, N, and W, Badger Army Ammunition Plant, Baraboo, WI	Department of the Army	JAN-2008
Draft Finding of Suitability To Transfer (FOST), Parcels O2, O6 and M3, Badger Army Ammunition Plant, Baraboo, WI	Department of the Army	JAN-2008
Documentation of Annual Maintenance Activities 2007, Closed, Covered, and Capped Sites, Badger Army Ammunition Plant	Department of the Army/Specpro, Inc.	JAN-2008
Gruber's Grove Bay Geotube Laydown Area Wetland Sampling, Badger Army Ammunition Plant	Department of the Army	JAN-2008
FINAL REMEDIAL ACTION COMPLETION REPORT, GRUBER'S GROVE BAY DREDGING PROJECT, BADGER ARMY AMMUNITION PLANT (CD)	Shaw Environmental, Inc./US Army Corps of Engineers	JAN-2008
OLD ACID AREA FUEL OIL SITE REPORT, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army/SpecPro, Inc.	FEB-2008
PARCEL O SITE INVESTIGATION, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army/SpecPro, Inc.	MAR-2008
FINAL DETERMINATION OF REMEDY FOR PROPELLANT BURNING GROUND WASTE PITS SUBSURFACE SOIL (CD)	Wisconsin Department of Natural Resources	MAR-2008
FINAL DETERMINATION OF REMEDY FOR PROPELLANT BURNING GROUND WASTE PITS SUBSURFACE SOIL (CD)	Wisconsin Department of Natural Resources	MAR-2008
GROUNDWATER DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	MAR-2008
FINAL ALTERNATIVE FEASIBILITY STUDY, PROPELLANT BURNING GROUND WASTE PITS SUBSURFACE SOIL, BADGER ARMY AMMUNITION PLANT (CD)	Shaw Environmental, Inc./US Army Corps of Engineers	MAR-2008
WDNR LETTER, FINAL CASE CLOSURE FOR THE BAAP - OLD ACID AREA FUEL OIL CASE; SAUK COUNTY (CD)	Wisconsin Department of Natural Resources	APR-2008
WDNR LETTER, NO ACTION REQUIRED FOR THE BADGER ARMY AMMUNITION PLANT PARCEL O SITE INVESTIGATION (CD)	Wisconsin Department of Natural Resources	APR-2008
CONSTRUCTION DOCUMENTATION REPORT, FINAL COVER CONSTRUCTION, LANDFILL 3118, BADGER	Department of the Army/SpecPro, Inc.	APR-2008

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Title	Author	Date
ARMY AMMUNITION PLANT (CD)		
DNT DEGRADATION SPECIAL EVENT, APRIL 2008, GW DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	APR-2008
DRAFT BASELINE ECOLOGICAL RISK ASSESSMENT, SETTLING PONDS AND SPOILS DISPOSAL AREAS SITE (CD)	Department of the Army/SpecPro, Inc./Exponent, Inc.	APR-2008
GROUNDWATER DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, AND SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	APR-2008
PARCEL P5 FUEL OIL INVESTIGATION (CD)	Department of the Army/SpecPro, Inc.	MAY-2008
NO FURTHER ACTION REQUIRED FOR THE BADGER ARMY AMMUNITION PLANT PARCEL P5 FUEL OIL RELEASE SITE (CD)	Wisconsin Department of Natural Resources	MAY-2008
LEAD BURNING HOUSE REMEDIAL INVESTIGATION - PARCELS P6 AND R (CD)	SpecPro, Inc.	MAY-2008
GROUNDWATER NARRATIVE SUMMARY REPORT (CD)	Department of the Army/SpecPro, Inc.	JUN-2008
GROUNDWATER NARRATIVE SUMMARY REPORT (CD)	Department of the Army/SpecPro, Inc.	JUN-2008
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	JUN-2008
PARCEL O4 REMEDIAL INVESTIGATION REPORT (CD)	Department of the Army/SpecPro, Inc.	JUL-2008
PARCEL Q3 REMEDIAL INVESTIGATION REPORT (CD)	Department of the Army/SpecPro, Inc.	JUL-2008
DETERRENT BURNING GROUND CAP AND COVER SYSTEM FIVE-YEAR OPERATION AND MAINTENANCE SUMMARY (CD)	Department of the Army	JUL-2008
BADGER ARMY - FINAL CLOSURE OF THE LANDFILL LIC: 3118 (CD)	Wisconsin Department of Natural Resources	JUL-2008
GROUNDWATER DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, AND SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	JUL-2008
SETTLING POND 4 INTERIM REMEDIAL ACTION (CD)	Department of the Army	AUG-2008
GROUNDWATER DATA CERTIFICATION, ALL HITS REPORT, SAMPLED WELLS LIST, AND SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	AUG-2008
NOTIFICATION FOR HAZARDOUS SUBSTANCE DISCHARGE FORMS FOR POST DEMOLITION SAMPLING CONTAMINANTS IDENTIFIED IN PARCELS H1, O7, P2, AND V AND POST DEMO REPORTS (CD)	Department of the Army/SpecPro, Inc.	SEP-2008
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	SEP-2008

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Title	Author	Date
PARCELS P2, P3, AND P4 REMEDIAL INVESTIGATION REPORT (CD)	Department of the Army/SpecPro, Inc.	OCT-2008
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), BUREAU OF INDIAN AFFAIRS, HO-CHUNK NATION, PARCELS O, O1, O5, Q2, U2, and X1 (CD)	Department of the Army	OCT-2008
SETTLING POND 4 INTERIM REMEDIAL ACTION REPORT (CD)	Department of the Army/SpecPro, Inc.	NOV-2008
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL M2 (CD)	Department of the Army	NOV-2008
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL S2 (CD)	Department of the Army	NOV-2008
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), BLUFFVIEW SANITARY DISTRICT, PARCEL R2 (CD)	Department of the Army	NOV-2008
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), BUREAU OF INDIAN AFFAIRS, HO-CHUNK NATION, PARCEL K4 (CD)	Department of the Army	NOV-2008
FINAL CASE CLOSURE FOR THE BAAP - WDOT PROJECTS AREA WITHIN SETTLING POND 4; SAUK COUNTY (CD)	Wisconsin Department of Natural Resources	DEC-2008
PARCEL R - DIESEL FUEL REMEDIAL ACTION REPORT (CD)	Department of the Army/SpecPro, Inc.	DEC-2008
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL P5 (CD)	Department of the Army	DEC-2008
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), BLUFFVIEW SANITARY DISTRICT, PARCEL T (CD)	Department of the Army	DEC-2008
LEACHATE RELEASE REMEDIAL INVESTIGATION REPORT (CD)	Department of the Army/SpecPro, Inc.	DEC-2008
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	DEC-2008

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DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), WISCONSIN DEPARTMENT OF TRANSPORTATION, PARCEL DOT (CD)	Department of the Army	JAN-2009
DOCUMENTATION OF ANNUAL MAINTENANCE ACTIVITIES 2008, CLOSED, COVERED, AND CAPPED SITES, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army/SpecPro, Inc.	JAN-2009
FIVE-YEAR REVIEW REPORT, DETERRENT BURNING GROUND (CD)	U.S. Army Corps of Engineers/Base Realignment & Closure Division	JAN-2009
STATE OF WISCONSIN - DEPARTMENT OF NATURAL RESOURCES, SUBSTANCE RELEASE NOTIFICATION REPORTS (SERTS) OF 01/26/2009 (CD)	Wisconsin Department of Natural Resources	JAN-2009

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Title	Author	Date
CONSTRUCTION DOCUMENTATION REPORT, PROPELLANT BURNING GROUND PHASE 2, CAP CONSTRUCTION (CD)	Department of the Army/SpecPro, Inc.	FEB-2009
GRUBER'S GROVE BAY QUALITY ASSURANCE PROJECT PLAN AND FIELD SAMPLING PLAN (CD)	Department of the Army/SpecPro, Inc.	FEB-2009
PARCEL O4 SOLVENT ABOVEGROUND STORAGE TANK REMEDIATION REPORT (CD)	Department of the Army/SpecPro, Inc.	FEB-2009
SUPPLEMENTAL INFORMATION FOR PARCELS O7, P2, H1, AND V POST-DEMOLITION SAMPLING (CD)	Department of the Army/SpecPro, Inc.	FEB-2009
SOLID WASTE FACILITY CLOSURE AND LONG-TERM CARE LICENSE FOR LANDFILL LICENSE NUMBER 3118 (CD)	Wisconsin Department of Natural Resources	FEB-2009
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	MAR-2009
REVIEW OF PROPELLANT BURNING GROUND PHASE 2 CAP CONSTRUCTION DOCUMENTATION REPORT (CD)	Wisconsin Department of Natural Resources	MAR-2009
FINAL CASE CLOSURE FOR THE BAAP - PARCEL O4 SOLVENT ASTs (LEAD) CASE; SAUK COUNTY; BRRTS NUMBER 02-57-553336 (CD)	Wisconsin Department of Natural Resources	MAR-2009
GROUNDWATER NARRATIVE SUMMARY REPORT (CD)	Department of the Army/SpecPro, Inc.	JUN-2009
FINAL AMENDMENT 9 EXPLOSIVE SAFETY SUBMISSION (ESS) FOR PROCESS AND SANITARY SEWER REMOVAL, BADGER ARMY AMMUNITION PLANT (CD)	Shaw Environmental, Inc./U.S. Army Corps of Engineers	JUN-2009
HIGHWAY 78 NORTH DITCH REMEDIAL INVESTIGATION REPORT (CD)	Department of the Army	JUN-2009
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	JUN-2009
OFF-SITE GROUNDWATER MONITORING DATA CERTIFICATION, EXCEEDANCE REPORT, ALL HITS REPORT, SAMPLED WELLS LIST, SAMPLED WELLS MAPS (CD)	Department of the Army/SpecPro, Inc.	JUL-2009
HIGHWAY 78 NORTH DITCH GROUNDWATER INVESTIGATION REPORT (CD)	Department of the Army	SEP-2009
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	SEP-2009
CONDITIONAL CLOSURE OF THE STH 78 NORTH DITCH CONTAMINATED SOIL CASE (CD)	Wisconsin Department of Natural Resources	OCT-2009
BASILINE ECOLOGICAL RISK ASSESSMENT WORK PLAN, SETTLING PONDS & SPOILS DISPOSAL AREAS SITE, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army/SpecPro, Inc.	OCT-2009
CONSTRUCTION DOCUMENTATION REPORT, PHASE 4 LINER CONSTRUCTION, EXPANSION OF LANDFILL 03646 (CD)	Department of the Army/SpecPro, Inc.	NOV-2009
GRUBER'S GROVE BAY SEDIMENT SAMPLING	Department of the	NOV-2009

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Title	Author	Date
REPORT (CD)	Army/SpecPro, Inc.	
DRAFT REVISED REMEDIATION GOALS PROPOSAL FOR THE ALT FS FINAL CREEK, SETTLING PONDS, AND SPOILS DISPOSAL AREAS (CD)	DEPT. OF THE ARMY LETTER	NOV-2009
SEWER REMOVAL/REMEDIATION INVESTIGATION - PARCEL O7 (CD)	Department of the Army	NOV-2009
RECORD OF ENVIRONMENTAL CONSIDERATION, UPDATE TO THE BADGER ARMY AMMUNITION PLANT RECORD OF DECISION AND ENVIRONMENTAL IMPACT STATEMENT (CD)	Department of the Army/SpecPro, Inc.	DEC-2009
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), HO-CHUNK NATION, PARCELS O3 AND P1 (CD)	Department of the Army	DEC-2009
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	DEC-2009

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STATE HIGHWAY 78 NORTH DITCH FINAL CLOSURE REQUEST AND PROPERTY CERTIFICATION DOCUMENT (CD)	Department of the Army	JAN-2010
SEWER REMOVAL/REMEDIATION ACTION IN PARCEL K4 - WDNR CLOSURE REQUEST (CD)	Department of the Army	JAN-2010
REMEDIATION ACTION IN PARCEL P5 - WDNR CLOSURE REQUEST (CD)	Department of the Army	JAN-2010
NORTHEAST BOUNDARY GROUNDWATER INVESTIGATION REPORT, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army	JAN-2010
WDNR LETTER: FINAL CASE CLOSURE FOR THE BAAP - PARCEL O7 POST-DEMOLITION AND SEWER REMOVAL CASE (CD)	Wisconsin Department of Natural Resources	JAN-2010
PARCEL O4 - REMEDIATION INVESTIGATION/REMEDIATION ACTION (CD)	Department of the Army	JAN-2010
DOCUMENTATION OF ANNUAL MAINTENANCE ACTIVITIES 2009, CLOSED, COVERED, AND CAPPED SITES, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army/SpecPro, Inc.	JAN-2010
DRAFT ENVIRONMENTAL CONDITION OF PROPERTY (ECP) UPDATES, AND PARCEL T, ECP CATEGORY CHANGE RATIONALE (CD)	Department of the Army/SpecPro, Inc.	JAN-2010
WDNR LETTER: FINAL CASE CLOSURE FOR THE BAAP - STH 78 NORTH DITCH CONTAMINATED SOIL CASE, BRRTS NUMBER 02-57-554197 (CD)	Wisconsin Department of Natural Resource	JAN-2010
ENVIRONMENTAL CONDITION OF PROPERTY (ECP), PARCELS O, O3, O5, AND X1, ECP CATEGORY CHANGE RATIONALE (CD)	Department of the Army/SpecPro, Inc.	FEB-2010
PARCEL P2 REMEDIATION ACTION - WDNR CLOSURE REQUEST (CD)	Department of the Army	FEB-2010
PARCEL P5 ADDITIONAL SAMPLING - WDNR CLOSURE REQUEST (CD)	Department of the Army	FEB-2010
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL P6 (CD)	Department of the Army	MAR-2010

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Title	Author	Date
WDNR LETTER: FINAL CASE CLOSURE FOR THE BAAP - PARCEL O4 POST-DEMOLITION & SEWER REMOVAL SITE; SAUK COUNTY; BRRTS NUMBER 02-57-554923 (CD)	Wisconsin Department of Natural Resources	MAR-2010
WDNR LETTER: FINAL CASE CLOSURE FOR THE BAAP - PARCEL P5 POST-DEMOLITION SITE; SAUK COUNTY; BRRTS NUMBER 02-57-554817 (CD)	Wisconsin Department of Natural Resources	MAR-2010
PARCEL P4 REMEDIAL ACTION/SEWER REMOVAL REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	MAR-2010
WDNR LETTER: FINAL CASE CLOSURE FOR THE BAAP - PARCEL P2 POST-DEMOLITION SITE; SAUK COUNTY; BRRTS NUMBER 02-57-553348 (CD)	Wisconsin Department of Natural Resources	MAR-2010
PARCEL S4 SEPTIC REMOVAL AND REMEDIAL ACTION - WDNR CLOSURE REQUEST (CD)	Department of the Army	MAR-2010
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	MAR-2010
DEPARTMENT OF THE ARMY REQUEST LETTER AND WDNR APPROVAL LETTER FOR MIRM VAPOR PHASE PROCESS CHANGE (CD)	Department of the Army/Wisconsin Department of Natural Resources	MAR-2010
PARCEL Q1 REMEDIAL ACTION/REMEDIAL INVESTIGATION REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	APR-2010
FINAL CASE CLOSURE FOR THE BAAP - PARCEL P4 POST-DEMOLITION AND SEWER REMOVAL SITE; SAUK COUNTY; BRRTS NUMBER 02-57-553280 (CD)	Wisconsin Department of Natural Resources	MAY-2010
WDNR RESPONSE TO THE REVISED "GRUBER'S GROVE BAY SEDIMENT SAMPLING REPORT", DATED NOVEMBER 2009 (CD)	Wisconsin Department of Natural Resources	MAY-2010
2010 GROUNDWATER NARRATIVE SUMMARY REPORT (CD)	Department of the Army/SpecPro, Inc.	JUN-2010
FINAL CASE CLOSURE FOR THE BAAP - PARCEL Q1 POST-DEMOLITION AND SEWER REMOVAL SITE; SAUK COUNTY; BRRTS NUMBER 02-57-555261 (CD)	Wisconsin Department of Natural Resources	JUN-2010
FINAL CASE CLOSURE FOR THE BAAP - PARCEL S4 POST-DEMOLITION AND SEPTIC SYSTEM REMOVAL SITE; SAUK COUNTY; BRRTS NUMBER 02-57-555262 (CD)	Wisconsin Department of Natural Resources	JUN-2010
PARCEL R LEAD BURNING HOUSE REMEDIATION REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army/SpecPro, Inc.	JUN-2010
WDNR & DEPARTMENT OF THE ARMY LETTERS, COMMENTS & RESPONSE TO COMMENTS ON BERA REPORT FOR BAAP SETTLING PONDS & SPOILS DISPOSAL AREAS SITE (CD)	Wisconsin Department of Natural Resources/Department of the Army	JUN-2010
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), BUREAU OF INDIAN AFFAIRS, HO-CHUNK NATION, PARCEL S4 (CD)	Department of the Army	JUN-2010
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	JUN-2010
FINDING OF SUITABILITY TO TRANSFER (FOST),	Department of the Army	JUL-2010

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Title	Author	Date
BUREAU OF INDIAN AFFAIRS, HO-CHUNK NATION, PARCEL O4 (CD)		
FINDING OF SUITABILITY TO TRANSFER (FOST), BUREAU OF INDIAN AFFAIRS, HO-CHUNK NATION, PARCEL O7 (CD)	Department of the Army	JUL-2010
FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL P2 (CD)	Department of the Army	JUL-2010
FINAL CASE CLOSURE FOR THE BAAP-LEAD BURNING HOUSE CASE (IN PARCEL R): SAUK COUNTY; BRRTS NUMBER 02-57-555505 (CD)	Wisconsin Department of Natural Resources	JUL-2010
PARCEL O3 REMEDIAL INVESTIGATION REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	JUL-2010
PARCEL R4 REMEDIAL INVESTIGATION REPORT - WDNR 'NO FURTHER ACTION' REQUEST (CD)	Department of the Army	JUL-2010
NO ACTION REQUIRED DETERMINATION FOR THE BAAP -PARCEL O3 POST-DEMOLITION SITE; SAUK COUNTY; BRRTS NUMBER 02-57-555782 (CD)	Wisconsin Department of Natural Resources	AUG-2010
PARCEL U2 REMEDIAL INVESTIGATION/REMEDIAL ACTION REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	AUG-2010
PARCEL K4 CLOSURE REQUEST (CD)	Department of the Army	AUG-2010
NO ACTION REQUIRED DETERMINATION(CORRECTED)FOR THE BAAP - PARCEL R4 UST SOIL INV.; SAUK COUNTY; BRRTS NUMBER 02-57-555784 (CD)	Wisconsin Department of Natural Resources	AUG-2010
PARCEL Q2 REMEDIAL INVESTIGATION/REMEDIAL ACTION REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	AUG-2010
NORTHEAST BOUNDARY WELLS GROUNDWATER MONITORING DATA CERTIFICATION & ALL HITS REPORT, SAMPLED WELLS LIST & SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	AUG-2010
RESIDENTIAL WELLS GROUNDWATER MONITORING DATA CERTIFICATION AND EXCEEDANCE REPORT AND ALL HITS REPORT, SAMPLED WELLS LIST, AND SAMPLED WELLS MAPS (CD)	Department of the Army/SpecPro, Inc.	AUG-2010
RESTORATION ADVISORY BOARD MEETING MINUTES FOR SEPTEMBER 29, 2010 (CD)	Department of the Army	SEP-2010
BADGER ARMY AMMUNITION PLANT, LOCATIONS OF OFF-SITE WELLS AND PRIVATE WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	SEP-2010
FINAL CASE CLOSURE FOR THE BAAP - PARCEL U2 POST-DEMOLITION & SEWER REMOVAL SITE; SAUK COUNTY; BRRTS NUMBER 02-57-555903 (CD)	Wisconsin Department of Natural Resources	SEP-2010
FINAL CASE CLOSURE FOR THE BAAP - PARCEL K4 POST-DEMOLITION & SEWER REMOVAL SITE; SAUK COUNTY; BRRTS NUMBER 02-57-554924 (CD)	Wisconsin Department of Natural Resources	SEP-2010
FINAL CASE CLOSURE FOR THE BAAP - PARCEL Q2 POST-DEMOLITION & SEWER REMOVAL SITE; SAUK COUNTY; BRRTS NUMBER 02-57-555902 (CD)	Wisconsin Department of Natural Resources	SEP-2010
GRUBER'S GROVE BAY SEDIMENT SAMPLING REPORT & DEPARTMENT OF THE ARMY LETTER RESPONSE TO WDNR COMMENTS ON 2009 GGB REPORT (CD)	Department of the Army/SpecPro, Inc.	SEP-2010

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Title	Author	Date
NORTHEAST BOUNDARY MONITORING WELL INSTALLATION REPORT (CD)	Department of the Army/SpecPro, Inc.	SEP-2010
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	SEP-2010
DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL R4 (CD)	Department of the Army	OCT-2010
PARCEL R1 - SEWER REMOVAL/REMEDIAL INVESTIGATION REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	OCT-2010
WDNR CONCURRENCE FOR PARCEL R4 ENVIRONMENTAL CONDITION OF PROPERTY CATEGORY (CD)	Department of the Army	OCT-2010
FEASIBILITY REPORT, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	OCT-2010
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	OCT-2010
CONSTRUCTION DOCUMENTATION REPORT, PHASE 5 LINER CONSTRUCTION, LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	NOV-2010
NO ACTION REQUIRED DETERMINATION FOR THE BAAP -PARCEL R1 SEWER REMOVAL/INVESTIGATION SITE; SAUK COUNTY; BRRTS NUMBER 02-57-556305 (CD)	Wisconsin Department of Natural Resources	NOV-2010
PARCEL U3 - REMEDIAL INVESTIGATION/REMEDIAL ACTION SUMMARY REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	NOV-2010
GROUNDWATER STANDARDS EXEMPTION REQUEST, FEASIBILITY REPORT - ADDENDUM NUMBER 1, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	NOV-2010
FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL P4 (CD)	Department of the Army	DEC-2010
FINDING OF SUITABILITY TO TRANSFER (FOST), BUREAU OF INDIAN AFFAIRS, HO-CHUNK NATION, PARCEL Q1 (CD)	Department of the Army	DEC-2010
FINDING OF SUITABILITY TO TRANSFER (FOST), BUREAU OF INDIAN AFFAIRS, HO-CHUNK NATION, PARCEL R1 (CD)	Department of the Army	DEC-2010
FEASIBILITY REPORT - ADDENDUM NUMBER 2, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	DEC-2010
WDNR COMPLETENESS DETERMINATION OF THE FEASIBILITY REPORT FOR THE CONTIGUOUS ADDITION TO LANDFILL 3646, EA & DECISION ON THE NEED FOR AN EIS (CD)	Wisconsin Department of Natural Resources	DEC-2010
WDNR LINER CONSTRUCTION DOCUMENTATION APPROVALS - BADGER CONSTRUCTION &	Wisconsin Department of Natural Resources	DEC-2010

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Title	Author	Date
DEMOLITION LANDFILL, SITE NO. 03646 (PHASE 4 & PHASE 5) (CD)		
GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	DEC-2010

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RESTORATION ADVISORY BOARD MEETING MINUTES FOR JANUARY 11, 2011 (CD)	Department of the Army	JAN-2011
PARCEL P3 - REMEDIAL INVESTIGATION/REMEDIAL ACTION REPORT - WDNR CLOSURE REQUEST (CD)	Department of the Army	JAN-2011
LIABILITY CLARIFICATION AND CURRENT CONDITIONS AT BADGER ARMY AMMUNITION PLANT PARCEL R4, SAUK COUNTY; BRRTS #07-57-556497 (CD)	Wisconsin Department of Natural Resources	JAN-2011
DOCUMENTATION OF ANNUAL MAINTENANCE ACTIVITIES 2010, CLOSED, COVERED AND CAPPED SITES, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army	JAN-2011
PLAN OF OPERATION REPORT, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	FEB-2011
WDNR RESPONSE TO THE REVISED "GRUBER'S GROVE BAY SEDIMENT SAMPLING REPORT", DATED AUGUST 2010 (CD)	Wisconsin Department of Natural Resources	FEB-2011
WDNR LETTER, FINAL CASE CLOSURE AND NO-ACTION-REQUIRED DETERMINATION FOR BAAAP PARCEL P3 RI/RA/PROCESS SEWER REOVAL PROJECTS (CD)	Wisconsin Department of Natural Resources	MAR-2011
ADDENDUM NUMBER 1, PLAN OF OPERATION REPORT, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	MAR-2011
ADDENDUM NUMBER 2, PLAN OF OPERATION REPORT, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	MAR-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL U3 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army	MAR-2011
MARCH 2011 GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LISTS, SAMPLED WELLS MAPS (CD)	Department of the Army/SpecPro, Inc.	MAR-2011
FINAL CASE CLOSURE AND NO-ACTION-REQUIRED DETERMINATION FOR BAAAP PARCEL P3 RI/RA/PROCESS SEWER REMOVAL PROJECTS (CD)	Wisconsin Department of Natural Resources	MAR-2011
BADGER ARMY AMMUNITION PLANT TECHNICAL ASSISTANCE PUBLIC PARTICIPATION (TAPP) GRANT APPEAL (CD)	Department of the Army	APR-2011
SUPPLEMENTAL INFORMATION, ADDENDUM NUMBER 2, PLAN OF OPERATION REPORT, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	APR-2011
AFTER ACTION REPORT, EXPLOSIVE SAFETY SUBMISSION, AMENDMENT 1 (CD)	Shaw Environmental, Inc./U.S. Army Corps of Engineers	APR-2011
APRIL 2011 INSPIRATION DRIVE AREA GROUNDWATER MONITORING DATA	Department of the Army/SpecPro, Inc.	APR-2011

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Title	Author	Date
CERTIFICATION AND ALL HITS REPORT, SAMPLED WELLS LIST AND MAPS (CD)		
RESTORATION ADVISORY BOARD MEETING MINUTES FOR APRIL 11, 2011 (CD)	Department of the Army	APR-2011
ADDITIONAL SUPPLEMENTAL INFORMATION, ADDENDUM NUMBER 2, PLAN OF OPERATION REPORT, CONTIGUOUS ADDITION TO LANDFILL 3646 (CD)	Department of the Army/SpecPro, Inc.	MAY-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL Y1 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army/SpecPro, Inc.	MAY-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL R3 TRUCK GARAGE (ACCOUNT #0518-00) WDNR CLOSURE REQUEST (CD)	Department of the Army/Badger Technical Services, LLC	JUN-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL X2 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army/SpecPro, Inc.	JUN-2011
2011 GROUNDWATER NARRATIVE SUMMARY REPORT (CD)	Department of the Army/SpecPro, Inc.	JUN-2011
JUNE 2011 GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	JUN-2011
RESTORATION ADVISORY BOARD MEETING MINUTES FOR JUNE 20, 2011 (CD)	Department of the Army	JUN-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL Y LEACHATE RELEASE INTERIM ACTION REPORT (CD)	Department of the Army/Badger Technical Services, LLC	JUL-2011
FINDING OF SUITABILITY TO TRANSFER (FOST), NATIONAL PARK SERVICE, WISCONSIN DEPARTMENT OF NATURAL RESOURCES, PARCEL P3 (CD)	Department of the Army	JUL-2011
AUGUST 2011 WEIGANDS BAY AREA GROUNDWATER MONITORING DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LIST, SAMPLED WELLS MAP (CD)	Department of the Army/SpecPro, Inc.	AUG-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCELS V, V2, AND V3 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	, Department of the Army/SpecPro, Inc.	AUG-2011
WDNR LETTER, NO FURTHER ACTION DETERMINATION FOR PARCEL R3 TRUCK GARAGE REMEDIAL INVESTIGATION/REMEDIAL ACTION PROJECT, BRRTS 03-57-557583 (CD)	Wisconsin Department of Natural Resources	SEP-2011
WDNR LETTER, NO FURTHER ACTION DETERMINATION FOR PARCEL Y1 LEACHATE RELEASE INTERIM REMEDIAL ACTION, BRRTS NUMBER 02-57-557590 (CD)	Wisconsin Department of Natural Resources	SEP-2011
DRAFT RESTORATION ADVISORY BOARD MEETING MINUTES FOR SEPTEMBER 12, 2011 (CD)	, Department of the Army	SEP-2011
WDNR LETTERS (2) REGARDING SOIL TESTING FOR DINITROTOLUENE ISOMERS (CD)	Wisconsin Department of Natural Resources	SEP-2011
SEPTEMBER 2011 GROUNDWATER MONITORING	Department of the	SEP-2011

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Title	Author	Date
DATA CERTIFICATIONS, EXCEEDANCE REPORTS, ALL HITS REPORTS, SAMPLED WELLS LISTS, SAMPLED WELLS MAPS (CD)	Army/SpecPro, Inc.	
WDNR LETTERS (2) REGARDING SOIL TESTING FOR DINITROTOLUENE ISOMERS (CD)	Wisconsin Department of Natural Resources	NOV-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: DETERRENT BURNING GROUND & FINAL REMEDY ENHANCED BIODEGRADATION SYSTEM NOTIFICATION OF DISCONTINUANCE (CD)	Department of the Army	NOV-2011
DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCELS K AND V1 & LEACHATE RELEASE REMEDIAL ACTION REPORT (CD)	Department of the Army/Badger Technical Services, LLC	DEC-2011
CONSTRUCTION DOCUMENTATION REPORT, PHASE 6 LINER CONSTRUCTION, LANDFILL 3646 (CD)	, Department of the Army/Badger Technical Services, LLC	DEC-2011
REVISED ALTERNATIVE FEASIBILITY STUDY, GROUNDWATER REMEDIAL STRATEGY (SEPTEMBER 2011 SCS BT SQUARED COMMENTS & FEBRUARY 2012 CORRECTIONS) (CD)	Department of the Army/Badger Technical Services, LLC	DEC-2011
REVISED ALTERNATIVE FEASIBILITY STUDY, GROUNDWATER REMEDIAL STRATEGY (SEPTEMBER 2011 SCS BT SQUARED COMMENTS & FEBRUARY 2012 CORRECTIONS) (CD)	Department of the Army/Badger Technical Services, LLC	DEC-2011

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DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL Q3 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army/SpecPro, Inc	JAN-2012
PARCEL R LOCOMOTIVE SHOP WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REPORT (CD)	Department of the Army/Badger Technical Services, LLC	JAN-2012
WDNR LETTER, SUBJECT: NO FURTHER ACTION DETERMINATION FOR PARCEL R LOCOMOTIVE SHOP CLEANUP, BRRTS NUMBER 02-57-558278 (CD)	Wisconsin Department of Natural Resources	JAN-2012
DOCUMENTATION OF ANNUAL MAINTENANCE ACTIVITIES, 2011, CLOSED, COVERED AND CAPPED SITES, BADGER ARMY AMMUNITION PLANT (CD)	Department of the Army	JAN-2012
CONSTRUCTION DOCUMENTATION REPORT, PHASES 1 & 2 FINAL COVER, LANDFILL 3646 (CD)	Department of the Army/Badger Technical Services, LLC	JAN-2012
WDNR LETTER, SUBJECT: PHASE 6 LINER CONSTRUCTION DOCUMENTATION APPROVAL, FOR THE CONSTRUCTION AND DEMOLITION LANDFILL (SITE NO. 03646) (CD)	Wisconsin Department of Natural Resources	JAN-2012
REVISED ALTERNATIVE FEASIBILITY STUDY, GROUNDWATER REMEDIAL STRATEGY (SEPTEMBER 2011 SCS BT SQUARED COMMENTS & FEBRUARY 2012 CORRECTIONS) (CD)	Department of the Army/Badger Technical Services, LLC	FEB-2012
WDNR PRELIMINARY DETERMINATION OF FEASIBILITY FOR AN ALTERNATIVE GROUNDWATER REMEDIAL STRATEGY AT AND NEAR THE BADGER ARMY AMMUNITION PLANT (CD)	Wisconsin Department of Natural Resources	FEB-2012

BADGER ARMY AMMUNITION PLANT

Non-BRAC Excess

Installation Restoration Program

Site Descriptions

Site ID: BAAP-001

Site Name: SETTLING PONDS/SPOILS DISPOSAL AREA

STATUS

Parcel: Parcel T1 (147.41 acres), Parcel M1 (160.6 acres), Parcel DOT (60.21 acres), Parcel C (114.22 acres)

Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Explosives, Metals

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	197701.....	197705
CS.....	197701.....	197705
RFI/CMS.....	198808.....	201009
DES.....	199501.....	201012
IRA.....	200706.....	200810
CMI(C).....	200809.....	201312

RIP Date: N/A

RC Date: 201312

SITE DESCRIPTION

These settling ponds, located along the installation's southern boundary, were first used in 1942. During the years of production, these man-made ponds received sanitary and industrial wastewater from the entire facility and surface runoff from the nitroglycerine, rocket paste, and magazine areas. Spoils removed, during dredging operations, were placed alongside the ponds. In the 1994 FS in situ soil stabilization/solidification and soil cover was the proposed remedial method. The currently impacted pond area is 67 acres, and the spoils disposal areas cover 21 acres. Soil sampling data, received in 2000 and submitted in the form of a data report in May 2001 to the WDNR in a comprehensive analysis indicates DNT is present throughout the site, not in localized areas as was previously indicated. Nitroglycerine and mercury are present in isolated areas, primarily Spoils Site 1.

A site-specific soil cleanup standards proposal was developed and in May 2002 it was submitted to the WDNR for review and approval. The proposal was developed in accordance with the WDNR Chapter NR 700. Specifically, the proposal was developed following the guidance detailed in NR 720.19, which, among other things, recommends that the site-specific standards process be followed.

In 2003, a follow-on RI was conducted to determine the condition of the soil in production areas across the installation. In 2004, a field study was completed to quantify the degradation of DNT in the vadose (unsaturated) soil under the settling ponds. In May 2005, the WDNR directed the Army to perform further ecological risk assessment work. In 2005 based on the WDNR's comments on the original risk assessment, the Army began work on a reevaluation of the risk assessment. In 2006, an ecological risk assessment was conducted and a US Army Center for Health Promotion and Preventive Medicine (USCHPPM) rodent sperm analysis was conducted. That draft report was received in December 2007. In February 2008 it was sent to the WDNR and the USEPA for review.

In September 2004 nine additional monitoring wells were installed on-site. The groundwater issues are currently being addressed under site BAAP-012, but the ponds do not appear to be a source.

In 2007, an IRA (soil dig and haul) was completed to address the WDNR's concerns for soils slated to become part of the GGB sediment in 2009 when Highway 78 is reconstructed through settling Pond 4. In spring 2008, per the WDNR's request to expedite the highway reconstruction land transfer, an alternative feasibility report for Pond 4 was approved. Soil removal achieved site closure in October 2009.

In 2009, Badger conducted additional soil sampling and submitted proposed remedial goals to WDNR. In addition, IRAs (soil dig and haul) began. Proposed soil cleanup levels agreed on with WDNR in 2010 allowed continued soil removal actions in 2011 and 2012. The alternative FS was submitted to WDNR in December 2012, preliminary approval of the proposed remedial goals and actions was received on Feb. 7, 2013. Final remedy approval was received June 2013, and site closure by January 2014.

Site ID: BAAP-001

Site Name: SETTLING PONDS/SPOILS DISPOSAL AREA

CLEANUP/EXIT STRATEGY

Get approval of FS remedy of soil removal, complete any remaining work, submit closure documentation, and get WDNR closure by August 2013.

The groundwater monitoring is tracked at BAAP-012.

Site ID: BAAP-012

Site Name: GW Monitoring ON and OFF Post

STATUS

Parcel: Parcel T1 (147.41 acres), Parcel S3 (39.67 acres), Parcel Q3 (239.22 acres), Parcel P5 (78.32 acres), Parcel H1 (29.06 acres), Parcel W (47.39 acres), Parcel V1 (96.08 acres), Parcel V (291.15 acres), Parcel U2 (100.43 acres), Parcel T (15.44 acres), Parcel R1 (14.11 acres), Parcel R (93.68 acres), Parcel P4 (47.13 acres), Parcel P3 (30.25 acres), Parcel P2 (161.64 acres), Parcel P1 (68.14 acres), Parcel O3 (12.85 acres), Parcel O (332.17 acres), Parcel M2 (17.97 acres), Parcel M1 (160.6 acres), Parcel M (385.31 acres), Parcel L (199.38 acres), Parcel K2 (17.29 acres), Parcel K1 (12.3 acres), Parcel K (1168.42 acres), Parcel J (9.91 acres), Parcel H (44.6 acres), Parcel F (20.19 acres), Parcel E (11.98 acres), Parcel DOT (60.21 acres), Parcel D (1670.51 acres), Parcel C (114.22 acres), Parcel B (55.36 acres), Parcel A (89 acres)

Phases	Start	End
RFA.....	197703.....	197703
CS.....	197703.....	197703
RFI/CMS.....	199107.....	199512
DES.....	201012.....	201312
IRA.....	199105.....	201202
CMI(C).....	201203.....	201512
CMI(O).....	201510.....	202009
LTM.....	202010.....	203403

RIP Date: 201512

RC Date: 202009

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Explosives, Volatiles (VOC)

Media of Concern: Groundwater

SITE DESCRIPTION

There are three AOCs for groundwater. One originates at the PBG (BAAP-33) in the southwest part of BAAP and the main concern is solvents. A groundwater extraction system currently captures groundwater from the PBG source area to the installation southern boundary. The area from the boundary to the Wisconsin River, just below the Wisconsin Power and Light Dam is not treated.

The second major AOC is located northeast of Badger near source areas Landfill No. 5 (BAAP-004) and the DBG (BAAP-006). Capping of the DBG in 2003 has eliminated infiltration, but isomers of DNT have been detected in the untreated groundwater past the installation's eastern boundary moving toward Weigand's Bay on the Wisconsin River.

The third AOC is the southeast quarter of the installation, where 2,6 DNT was detected at the enforcement standard on and off the installation: levels appear to be decreasing. No specific source has been found and there is no treatment in this area. The suspected source was discharge of production washwaters to unlined ditches in the rocket propellant production area that ended in 1976.

Five relatively shallow private residential water supply wells in the southern off-post area were affected: three from solvent contamination from the PBG and two from the rocket area 2,6 DNT. Army provided new wells drilled into bedrock (for the three with solvents) or the into lower, uncontaminated portion of the aquifers (for the two with 2,6 DNT).

A final off-post contingency plan (supply bottled water to affected homes once exceedences of state drinking water standards are confirmed in their wells) has been prepared.

Installation of monitoring wells on and off the installation continues as the lab's ability to detect DNT at lower levels led to more

Site ID: BAAP-012

Site Name: GW Monitoring ON and OFF Post

findings and increasingly stringent state standards.

DNT detections above the enforcement standards continue in monitoring wells in the PBG plume to the south and the DBG plume to the east of Badger.

Quarterly monitoring continues and is currently performed by Badger's on-site laboratory. The WDNR reviews the monitoring program regularly and it is modified as needed.

In November 2010, the state added additional regulated groundwater contaminants, including a cumulative of the six DNT isomers.

In September 2010, the Army proposed a district drinking water system to eliminate residential well monitoring requirements and reduce other monitoring.

The alternative FS proposing final remedies for all groundwater issues at Badger received WDNR approval June 28, 2012. The remedy includes a district water supply (awaiting local municipal approval), MNA, reduced residential and monitoring well sampling, and shutdown of the treatment systems tracked at BAAP-33.

In 2013, WDNR approval of MNA is expected with reduction in home well monitoring, regardless of public water system municipal approval.

In addition to the continued groundwater monitoring, the public water system installation, and limited operation of the public water system, the remaining remediation efforts require a variety of technical, administrative, and related activities to support all facets of facility environmental restoration analysis and implementation. An understanding of parcel history, contamination characteristics, remedial goals, and a remedial alternatives analysis of each remediation site is required. Also, an understanding of the regulatory climate and a working relationship with RAB members, WDNR, and other regulatory agency personnel is essential. Starting in FY2014, BAAP-012 will be utilized to provide professional site management for the entire facility.

CLEANUP/EXIT STRATEGY

Installation-wide and off-site groundwater monitoring is conducted and funded under this site. Leases for off-site monitoring wells are negotiated and fees paid annually to the landowners through the Corps of Engineers Real Estate office. In February 2012 the WDNR gave preliminary approval to Army's proposed remedies. Get approval to install a district drinking water system to eliminate residential well monitoring and potential human exposure. Continue phased shut down of the pump-and-treat systems (IRM shutdown in 2012 was start) under WDNR oversight. Reduce residential and monitoring wells to best support long-term MNA that will continue through 2034 or longer.

Site ID: BAAP-33

Site Name: PROP BRNG GRD - CONTAMINATED WASTE PITS

STATUS

Parcel: Parcel T1 (147.41 acres), Parcel H (44.6 acres), Parcel F (20.19 acres), Parcel D (1670.51 acres)

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Explosives, Volatiles (VOC)

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	197701.....	197705
CS.....	197701.....	197705
RFI/CMS.....	198808.....	200612
DES.....	198809.....	200806
IRA.....	198908.....	199612
CMI(C).....	199510.....	200811
CMI(O).....	200105.....	201709

RIP Date: 200811

RC Date: 201709

SITE DESCRIPTION

The PBG waste pits are located in the southwestern portion of BAAP. The contaminated waste pits area is approximately three acres and contained three disposal pits and a large open area. From the 1950s through the 1970s the pits were used to burn propellant-contaminated materials and organic solvents. The liquid waste materials migrated down through the sandy soil to the groundwater. A groundwater plume containing solvents and DNT has moved south past the installation boundary (see BAAP-12).

Soil remedies originally selected in 1994 included soil vapor extraction (SVE) followed by soil removal, washing, and composting. In 1997 the soil washing was shown to be ineffective in removing DNT. In February 1998 an SVE system to remove solvents was installed, operated successfully and was removed in September 1999. Shallow soils contaminated with the non-volatile DNT and metals were removed from the waste pits in the fall of 1999 and a pilot biotreatment system was installed in Waste Pit 1 to treat DNT in the subsurface soil. The pilot system proved to successfully increase the rate of naturally occurring biological decomposition of the chemicals in the soil. A full-scale biotreatment system was installed and operated through 2005.

A revised alternative FS was prepared to finalize the change in the soils remedy. The FS proposed the SVE system, partial excavation and off-site incineration of soils, a biotreatment system, and installation of a cap as the final remedy. In February 2008 the WDNR approved this remedy. In the summer of 2008 the pits area cap installation completed the soil remediation actions.

The groundwater remediation started in 1990 with the construction of a pump-and-treat system called the IRM to capture contamination from the source (pits area). In 1996, groundwater capture along the southern boundary began with the construction of the MIRM. In 2005 and 2006, additional capture wells were installed within the plume and distal boundary wells abandoned. Biofouling of these wells required additional process measures in 2006 and 2007. Efforts to optimize groundwater capture continue.

In 2002 and 2003, investigations for other potential sources of solvents in the area were completed; the results were negative.

The PBG RCRA cap/cover construction was completed in November 2008. In September 2010, the Army proposed a district drinking water supply to eliminate long-term residential well monitoring, and reduce other groundwater monitoring and treatment. An alternate FS proposing shutdown of the groundwater treatment option funded here and a district water system and MNA for the final groundwater remedy (BAAP-12) received WDNR approval June 28, 2012. WDNR approved a phased shutdown of the pump-and-treat systems, starting with IRM shutdown/layaway in December 2012. Monitoring to check specifically for problems from rebound of contaminant levels is underway. If successful, MIRM phased shutdown will follow.

In November 2010, the state set new groundwater standards including all six DNT isomers separately and as a cumulative value.

Site ID: BAAP-33

Site Name: PROP BRNG GRD - CONTAMINATED WASTE PITS

CLEANUP/EXIT STRATEGY

The RCRA cap installed in 2008 was designed as Phase II of the 1949 pit cap. It is maintained under BAAP-35 site-wide cap and cover maintenance.

The pump-and-treat systems (IRM/MIRM) will be phased to shut down completely by 2016. If WDNR agrees that no groundwater conditions require system restart, it will be removed.

Groundwater monitoring is done as a part of an installation-wide program tracked at BAAP-012.

Site ID: BAAP-35

Site Name: CAP & COVER MAINTENANCE

STATUS

Parcel: Parcel V1 (96.08 acres), Parcel K2 (17.29 acres), Parcel K1 (12.3 acres), Parcel H (44.6 acres)

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater, Soil

Phases	Start	End
RFA.....	197701.....	197705
CS.....	197701.....	197705
RFI/CMS.....	198808.....	199512
DES.....	199509.....	199807
CMI(C).....	199707.....	199812
LTM.....	201002.....	205403

RIP Date: N/A

RC Date: 199812

SITE DESCRIPTION

The PBG racetrack area includes the area used to burn off-spec propellants over the years. This disposal operation was eventually permitted as the hazardous waste thermal treatment unit. It was closed after soil removal, with a soil cover placed over the area in 1994. Landfill 1, which received solid waste and ash from about 1944 to 1955, was capped in 1997. The 1949 pit area, used for open burning of wastes after 1944 through 1950s, was backfilled in 1962. It was formally closed with an engineered cap in 1998. In 2008 the cap was extended as originally planned to cover the PBG waste pits area.

This site is now used to track all long-term care requirements on the former installation lands, to insure all requirements are met.

The closed sites addressed under this effort include the PBG area caps and covers (Racetrack Area soil cover, Landfill No. 1 cap, and the combined PBG pits/1949 pit cap), Landfill No. 5 cap, and the DBG area/Landfill No. 3 cap. Other areas may be added as sites are remediated.

The WDNR requires long-term operation and maintenance of these caps and covers for at least 40 years beyond the closure date of the sites.

A five-year review was done in FY2008 and is underway for FY2013.

CLEANUP/EXIT STRATEGY

All cap and cover maintenance costs for any site on the installation are tracked here. An installation-wide review is underway. WDNR requires maintenance of caps for at least 40 years from installation date. Contracting for maintenance will switch from installation to USAEC or US Army Corps of Engineers in out-years.

Site ID: BAAP-40
Site Name: GRUBER'S GROVE BAY

STATUS

Parcel: NONE

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Sediment

Phases	Start	End
RFA.....	199805.....	199903
CS.....	199904.....	200009
RFI/CMS.....	199909.....	201309
DES.....	200006.....	201412
IRA.....	200103.....	200709
CMI(C).....	201310.....	201512

RIP Date: N/A

RC Date: 201512

SITE DESCRIPTION

The GGB site received Badger discharge waters during production. State sampling of sediment in November 1998 showed elevated lead, mercury, zinc and ammonia. The results were confirmed in a 1999 sampling.

The RI was completed in 2000. The selected remedy was dredging of sediments with disposal on the installation. The dredged materials were pumped into fabric tubes for dewatering. The water was treated and sprayed on agricultural land on the installation. The dry, filled tubes were buried-in-place, in an area north of the settling ponds (Parcel M2). Dredging began in June 2001, and was completed in November 2001, with 88,000 cubic yards (cy) removed. The geotubes were covered over in September 2002 (Phase I). Bay restoration activities (fish cribs, aquatic plants) were completed in September 2002. Final grading and seeding was completed in July 2003.

In early 2003, the WDNR sampled the bay sediments and found some elevated levels of metals. In 2004 and 2005 the Army investigated residual concentrations and toxicity of metals in bay sediments. On May 5, 2005, the WDNR sent a letter to the Army recommending sediment removal or an additional ecological risk assessment.

In 2006, the bay was dredged again, following procedures similar to those used in 2001. Attention was given to shoreline areas within the dredge boundary. In addition, CS was used to verify completion. Removal of the sediment (52,532 cy) has been completed. The laydown area was covered in 2007. The final report was submitted to the WDNR in February 2008. Subsequent sampling by Army and the WDNR reveals mercury above cleanup level remains.

In 2009, WDNR started review of all available information to determine if additional remediation is required. The WDNR sent a letter in May 2010 requesting Badger evaluate alternatives that address restoring GGB sediments to levels protective of benthic organisms. On Feb. 3, 2011 WDNR requested Army action. Alternatives are currently being screened, supplemental data will be collected, and technical review meetings with the WDNR are being conducted in 2013 to make sure the remedy recommended (sediment treatment) is technically suitable for the site.

CLEANUP/EXIT STRATEGY

Based on the post-dredging sample results, mercury-impacted sediment remains. WDNR and the Army have a preliminary agreement on the closure criteria so a remedy design can begin. The remedy involves the design and placement of a sediment cap. If the cap is successful, NFA will be required.

Site ID: BAAP-43
Site Name: Site-Wide RI

STATUS

Parcel: Parcel S1 (35.4 acres), Parcel Y2 (24.32 acres), Parcel X3 (36.95 acres), Parcel Y1 (32.87 acres), Parcel S5 (15.71 acres), Parcel S3 (39.67 acres), Parcel R3 (35.75 acres), Parcel P6 (43.25 acres), Parcel H1 (29.06 acres), Parcel Y (68.15 acres), Parcel X2 (42.37 acres), Parcel R1 (14.11 acres), Parcel R (93.68 acres), Parcel P1 (68.14 acres), Parcel H (44.6 acres)

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Explosives, Metals

Media of Concern: Soil

Phases	Start	End
RFA.....	200305.....	200504
RFI/CMS.....	200505.....	201402
DES.....	200606.....	201403
CMI(C).....	200606.....	201409

RIP Date: N/A

RC Date: 201409

SITE DESCRIPTION

Previous RIs did not address the production and support areas at this site. Full RIs are required with cleanup, as needed.

From 2005 to 2010 demolition was funded by Operations and Maintenance, Army (OM,A). Post-demolition RI work followed which took place between the finishing areas and the start of the production lines. RI/RA work is expected to be complete in FY2013 at the production buildings and in FY2014 at the support areas.

CLEANUP/EXIT STRATEGY

Complete RI/RA actions and provide geographic information system (GIS) and other support to achieve closure with regulatory agencies.

IRP Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
BAAP-002	BALLISTICS POND and Ditches	200204	WDNR letter dated April 2002 stating NFA
BAAP-003	OLEUM PLANT AND POND	199812	WDNR letter dated March 2005 stating NFA
BAAP-004	EXISTING LANDFILL (LANDFILL #5)	200112	WDNR letter dated Sept 1989 stating NFA
BAAP-005	NITROGLYCERINE Pond	200012	WDNR letter dated July 2000 stating NFA
BAAP-006	DETERRENT BURNING GROUND	201210	WDNR letter October 14, 2002 modifies IFCR to include approved remedy
BAAP-008	ROCKET PASTE AREA	200304	WDNR letter dated July 2000 stating NFA
BAAP-009	OLD ACID AREA	200805	Letter from WDNR dated 30-Jan-08 confirming the completion of lead cleanup and NFA required.
BAAP-010	NEW ACID AREA	200112	WDNR letter dated March 2005 stating NFA
BAAP-011	OLD FUEL OIL TANKS	200112	WDNR letter dated Jan 2006 stating NFA
BAAP-013	UNDERGROUND STORAGE TANKS (10)	199008	WDNR letter dated Mar 1999 stating NFA
BAAP-014	LANDFILL #6 (NEW 1989)	199908	USACHPPM review 8/99 - not DERA eligible
BAAP-015	SANITARY LANDFILL #3 (CLOSED)	199008	Capped as part of BAAP-006. NFA
BAAP-016	Landfill#4/POWERHOUSE #2	199008	Bldg demolished in 2005. WDNR letter 12/05 NFA
BAAP-020	BALL POWDER PILOT PLANT	199008	WDNR letter dated July 2000 stating NFA
BAAP-021	BALLISTICS AND TESTING AREA	199008	WDNR letter dated Jan 2005 stating NFA
BAAP-022	BALL PROPELLANT PRODUCTION AREA	199008	WDNR letter dated July 2000 stating NFA
BAAP-023	INGREDIENT WAREHOUSE	199008	WDNR letter dated July 2000 stating NFA
BAAP-024	SMOKELESS POWDER PRODUCTION	199008	WDNR letter dated July 2000 stating NFA
BAAP-025	SALVAGE YARD	199008	USACHPPM review 7/99 - not DERA eligible
BAAP-026	HAZARDOUS WASTE STORAGE AREA	199108	WDNR letter dated Oct 2004 stating NFA
BAAP-027	WASTE PROCESSOR	199008	WDNR letter dated July 2000 stating NFA
BAAP-029	SOLVENT RECOVERY STILL AREA	199008	WDNR letter dated July 2000 stating NFA
BAAP-030	LABORATORIES-BLDG# 201,2556,4034,6682	199008	USACHPPM review 7/99 - not DERA eligible
BAAP-031	COAL YARD	199008	WDNR letter dated July 2000 stating NFA
BAAP-032	ABOVE GROUND STORAGE TANKS	199008	WDNR letter dated July 2000 stating NFA
BAAP-34	PROP BRNG GRD - THERM TRTMT UNT/RACETRCK	200112	WDNR letter dated Sept 1996 stating NFA
BAAP-36	EAST & WEST ROCKET AREA DITCHES	200305	WDNR letter dated Sept 1989 stating NFA

IRP Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
BAAP-37	POWERHOUSE # 1 SOIL OLD FUEL SPILLS	200606	WDNR letter dated July 2006 stating NFA
BAAP-38	TRANSFORMER YARD - PCB IN SOIL	199612	WDNR letter dated Jan 1997 stating NFA
BAAP-39	OLEUM LANDFILL	199808	WDNR letter dated Apr 2002 stating NFA
BAAP-42	Box Wash Accounts 1890-1&2	200707	WDNR letter dated June 2007 stating NFA

IRP Schedule

Date of IRP Inception: 197701

Past Phase Completion Milestones

1977

CS	(BAAP-36 - EAST & WEST ROCKET AREA DITCHES, BAAP-35 - CAP & COVER MAINTENANCE, BAAP-34 - PROP BRNG GRD - THERM TRTMT UNT/RACETRCK, BAAP-33 - PROP BRNG GRD - CONTAMINATED WASTE PITS, BAAP-012 - GW Monitoring ON and OFF Post, BAAP-010 - NEW ACID AREA, BAAP-009 - OLD ACID AREA, BAAP-008 - ROCKET PASTE AREA , BAAP-006 - DETERRENT BURNING GROUND, BAAP-005 - NITROGLYCERINE Pond , BAAP-004 - EXISTING LANDFILL (LANDFILL #5), BAAP-003 - OLEUM PLANT AND POND, BAAP-002 - BALLISTICS POND and Ditches, BAAP-001 - SETTLING PONDS/SPOILS DISPOSAL AREA)
SI	(BAAP-011 - OLD FUEL OIL TANKS)
RFA	(BAAP-36 - EAST & WEST ROCKET AREA DITCHES, BAAP-35 - CAP & COVER MAINTENANCE, BAAP-34 - PROP BRNG GRD - THERM TRTMT UNT/RACETRCK, BAAP-33 - PROP BRNG GRD - CONTAMINATED WASTE PITS, BAAP-032 - ABOVE GROUND STORAGE TANKS, BAAP-031 - COAL YARD, BAAP-030 - LABORATORIES-BLDG# 201,2556,4034,6682, BAAP-029 - SOLVENT RECOVERY STILL AREA, BAAP-027 - WASTE PROCESSOR, BAAP-025 - SALVAGE YARD, BAAP-024 - SMOKELESS POWDER PRODUCTION, BAAP-023 - INGREDIENT WAREHOUSE, BAAP-022 - BALL PROPELLANT PRODUCTION AREA, BAAP-021 - BALLISTICS AND TESTING AREA, BAAP-020 - BALL POWDER PILOT PLANT, BAAP-012 - GW Monitoring ON and OFF Post, BAAP-010 - NEW ACID AREA, BAAP-009 - OLD ACID AREA, BAAP-008 - ROCKET PASTE AREA , BAAP-006 - DETERRENT BURNING GROUND, BAAP-005 - NITROGLYCERINE Pond , BAAP-004 - EXISTING LANDFILL (LANDFILL #5), BAAP-003 - OLEUM PLANT AND POND, BAAP-002 - BALLISTICS POND and Ditches, BAAP-001 - SETTLING PONDS/SPOILS DISPOSAL AREA, BAAP-015 - SANITARY LANDFILL #3 (CLOSED), BAAP-014 - LANDFILL #6 (NEW 1989))
PA	(BAAP-011 - OLD FUEL OIL TANKS, BAAP-016 - Landfill#4/POWERHOUSE #2 , BAAP-013 - UNDERGROUND STORAGE TANKS (10))

1987

IRA	(BAAP-010 - NEW ACID AREA)
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1990

IRA	(BAAP-004 - EXISTING LANDFILL (LANDFILL #5))
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1991

RFA	(BAAP-37 - POWERHOUSE # 1 SOIL OLD FUEL SPILLS, BAAP-026 - HAZARDOUS WASTE STORAGE AREA)
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1992

RFA	(BAAP-42 - Box Wash Accounts 1890-1&2)
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1993

RFA	(BAAP-38 - TRANSFORMER YARD - PCB IN SOIL)
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1994

CS	(BAAP-42 - Box Wash Accounts 1890-1&2, BAAP-37 - POWERHOUSE # 1 SOIL OLD FUEL SPILLS)
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1995

RFI/CMS	(BAAP-005 - NITROGLYCERINE Pond)
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1996

DES	(BAAP-005 - NITROGLYCERINE Pond)
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RFI/CMS	(BAAP-37 - POWERHOUSE # 1 SOIL OLD FUEL SPILLS, BAAP-35 - CAP & COVER MAINTENANCE, BAAP-34 - PROP BRNG GRD - THERM TRTMT UNT/RACETRCK, BAAP-012 - GW Monitoring ON and OFF Post, BAAP-010 - NEW ACID AREA, BAAP-006 - DETERRENT BURNING GROUND, BAAP-004 - EXISTING LANDFILL (LANDFILL #5), BAAP-003 - OLEUM PLANT AND POND, BAAP-38 - TRANSFORMER YARD - PCB IN SOIL)
RI/FS	(BAAP-011 - OLD FUEL OIL TANKS)

1997

CMI(C) (BAAP-38 - TRANSFORMER YARD - PCB IN SOIL)
 IRA (BAAP-33 - PROP BRNG GRD - CONTAMINATED WASTE PITS)

1998

RFA (BAAP-39 - OLEUM LANDFILL)
 CMI(C) (BAAP-34 - PROP BRNG GRD - THERM TRTMT UNT/RACETRCK)
 CS (BAAP-39 - OLEUM LANDFILL)
 DES (BAAP-37 - POWERHOUSE # 1 SOIL OLD FUEL SPILLS, BAAP-35 - CAP & COVER MAINTENANCE, BAAP-34 - PROP BRNG GRD - THERM TRTMT UNT/RACETRCK)

1999

CMI(C) (BAAP-35 - CAP & COVER MAINTENANCE)
 RFA (BAAP-40 - GRUBER'S GROVE BAY)
 LTM (BAAP-003 - OLEUM PLANT AND POND, BAAP-014 - LANDFILL #6 (NEW 1989))

2000

CS (BAAP-40 - GRUBER'S GROVE BAY)

2001

IRA (BAAP-006 - DETERRENT BURNING GROUND)
 CMI(C) (BAAP-005 - NITROGLYCERINE Pond)

2002

LTM (BAAP-011 - OLD FUEL OIL TANKS, BAAP-34 - PROP BRNG GRD - THERM TRTMT UNT/RACETRCK, BAAP-010 - NEW ACID AREA, BAAP-004 - EXISTING LANDFILL (LANDFILL #5))
 RFI/CMS (BAAP-002 - BALLISTICS POND and Ditches)

2003

DES (BAAP-36 - EAST & WEST ROCKET AREA DITCHES, BAAP-008 - ROCKET PASTE AREA , BAAP-006 - DETERRENT BURNING GROUND)
 RFI/CMS (BAAP-36 - EAST & WEST ROCKET AREA DITCHES, BAAP-008 - ROCKET PASTE AREA)
 CMI(C) (BAAP-36 - EAST & WEST ROCKET AREA DITCHES, BAAP-008 - ROCKET PASTE AREA)

2004

CMI(C) (BAAP-006 - DETERRENT BURNING GROUND)

2005

RFA (BAAP-43 - Site-Wide RI)
 IRA (BAAP-009 - OLD ACID AREA)
 RFI/CMS (BAAP-42 - Box Wash Accounts 1890-1&2, BAAP-009 - OLD ACID AREA)

2006

CMI(O) (BAAP-37 - POWERHOUSE # 1 SOIL OLD FUEL SPILLS)
 CMI(C) (BAAP-37 - POWERHOUSE # 1 SOIL OLD FUEL SPILLS)

2007

RFI/CMS (BAAP-33 - PROP BRNG GRD - CONTAMINATED WASTE PITS)
 DES (BAAP-42 - Box Wash Accounts 1890-1&2, BAAP-009 - OLD ACID AREA)

2007

CMI(C) (BAAP-42 - Box Wash Accounts 1890-1&2)

IRA (BAAP-40 - GRUBER'S GROVE BAY)

2008

CMI(C) (BAAP-009 - OLD ACID AREA)

DES (BAAP-33 - PROP BRNG GRD - CONTAMINATED WASTE PITS)

2009

CMI(C) (BAAP-33 - PROP BRNG GRD - CONTAMINATED WASTE PITS)

IRA (BAAP-001 - SETTLING PONDS/SPOILS DISPOSAL AREA)

2010

RFI/CMS (BAAP-001 - SETTLING PONDS/SPOILS DISPOSAL AREA)

2011

DES (BAAP-001 - SETTLING PONDS/SPOILS DISPOSAL AREA)

2012

IRA (BAAP-012 - GW Monitoring ON and OFF Post)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID	Site Name	ROD/DD Title	ROD/DD Date
BAAP-012	GW Monitoring ON and OFF Post	Water Supply System, Badger AAP	20131130

Final RA(C) Completion Date: 201512

Schedule for Next Five-Year Review: 2013

Estimated Completion Date of IRP at Installation (including LTM phase): 205403

BADGER ARMY AMMUNITION PLANT IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
BAAP-001	SETTLING PONDS/SPOILS DISPOSAL AREA	CMI(C)						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
BAAP-012	GW Monitoring ON and OFF Post	DES						
		CMI(C)						
		CMI(O)						
		LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
BAAP-33	PROP BRNG GRD - CONTAMINATED WASTE PITS	CMI(O)						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
BAAP-35	CAP & COVER MAINTENANCE	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
BAAP-40	GRUBER'S GROVE BAY	DES						
		CMI(C)						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
BAAP-43	Site-Wide RI	RFI/CMS						
		DES						
		CMI(C)						

BADGER ARMY AMMUNITION PLANT

Non-BRAC Excess Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 1/0

Installation Site Types with Future and/or Underway Phases

1 Industrial Discharge
(CC-BAAP-44)

Most Widespread Contaminants of Concern

Explosives, Metals, Polychlorinated Biphenyls (PCB), Semi-volatiles (SVOC), Volatiles (VOC)

Media of Concern

Soil

Completed Remedial Actions (Interim Remedial Actions / Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY	Cost
CC-BAAP-44	Abandoned Industrial Sewer Network	IRA	WASTE REMOVAL - SOLIDS (NON-SOILS)	2012	TBD
CC-BAAP-44	Abandoned Industrial Sewer Network	IRA	WASTE REMOVAL - SOILS	2012	TBD

Duration of CR

Year of CR Inception: 200010

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201407/201407

Date of CR completion including Long Term Management (LTM): 201407

CR Contamination Assessment

Contamination Assessment Overview

Environmental restoration activities include the Installation Restoration Program (IRP) and Military Munitions Response Program (MMRP). On Dec. 29, 2008, the ODUSD(I&E), issued an interim policy for Defense Environmental Restoration Program (DERP) eligibility that rescinded the 1986 eligibility date for the IRP and the 2002 eligibility date for the MMRP. This made many sites previously addressed in the Army's Compliance-related Cleanup (CC) program eligible for the DERP. Sites which are now eligible for the MMRP have been migrated from Army Environmental Database - Compliance-related Cleanup (AEDB-CC) and given the naming convention of other Munitions Response (MR) sites. The newly eligible non-MR type sites are considered to be Installation Restoration (IR) sites; however, the newly eligible sites are being coded as Compliance Restoration (CR) in AEDB-R to distinguish them from the original IR sites and IR metrics.

The total estimated documented abandoned production area sewers was 58.18 miles (plus additional undocumented drains) at depths from 4 to 30 ft below ground surface (bgs). Sewer pipe (three foot tile sections), was in poor condition with collapses and heavy damage. Previous spot investigations found DNTs, lead, mercury, propellants, dibutyl-phthalate (DBP) diphenylamine (DPA), PCBs above required cleanup levels in pipes and surrounding soils. RI work included location surveys, safety oversight, removing overlying soil and structures, rerouting active utility lines interfering with excavation, collecting pipe and soil samples, laboratory analysis, disposal of investigation derived waste, and reports. An active Bluffview sanitary sewer line serving 1000 people rested atop sections of an abandoned production sewer, and required relocation.

Investigation and cleanup was completed in 2012.

Cleanup Exit Strategy

As structures are demolished, inspection, removal and closure of remaining sewers will be completed. Closure will be complete when all parcels have received closure letters from state.

CR Previous Studies

	Title	Author	Date
2011	WDNR LETTER, FINAL CASE CLOSURE AND NO-ACTION-REQUIRED DETERMINATION FOR BAAAP PARCEL P3 RI/RA/PROCESS SEWER REOVAL PROJECTS (CD)	Wisconsin Department of Natural Reso	MAR-2011
	DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL U3 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army	MAR-2011
	DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL X2 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army/SpecPro, Inc	JUN-2011
	DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCELS V, V2, AND V3 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army/SpecPro, Inc.	AUG-2011
2012	DEPARTMENT OF THE ARMY LETTER, SUBJECT: PARCEL Q3 WISCONSIN DEPARTMENT OF NATURAL RESOURCES CLOSURE REQUEST (CD)	Department of the Army/SpecPro, Inc.	JAN-2012

BADGER ARMY AMMUNITION PLANT

Non-BRAC Excess

Compliance Restoration

Site Descriptions

Site ID: CC-BAAP-44

Site Name: Abandoned Industrial Sewer Network

STATUS

Parcel: Parcel S1 (35.4 acres), Parcel Y2 (24.32 acres), Parcel S3 (39.67 acres), Parcel R3 (35.75 acres)

Regulatory Driver: RCRA

Contaminants of Concern: Asbestos, Lead Based Paint, Metals, Munitions and explosives of concern (MEC), Polychlorinated Biphenyls (PCB)

Media of Concern: Soil

Phases	Start	End
RFA.....	200010.....	200812
RFI/CMS.....	200905.....	201407
IRA.....	200906.....	201207

RIP Date: N/A

RC Date: 201407

SITE DESCRIPTION

The estimated length of the abandoned production area sewers was documented to be 68.18 miles at depths from 4 to 30 ft below ground surface. Sewer pipe (in three-foot tile sections) was found in poor condition with collapses and damage. In addition to the original estimate, undocumented shallow drains were found. Previous spot investigations found DNT, lead, mercury, propellants, DBP, DPA, PCBs above required cleanup levels in pipes and surrounding soils. RI work included location surveys, safety oversight, removing overlying soil and structures, rerouting active utility lines interfering with excavation, collecting pipe and soil samples, laboratory analysis, disposal of investigation derived waste, and reports. An active Bluffview sanitary sewer line serving 1000 people rested atop sections of abandoned production sewer, requiring relocation.

In 2009, relocation of active sewer lines and inspection/removal/closure of approximately 55 percent of sewers was completed. In 2012 the last of the sewer lines were investigated, remediated where necessary, and closed. Site closure documentation by parcel will be complete in FY2014.

CLEANUP/EXIT STRATEGY

Closure will be complete when all parcels have received closure letters from the state.

CR Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
There are no NFA sites			

CR Schedule

Date of CR Inception: 200010

Past Phase Completion Milestones

2009

RFA (CC-BAAP-44 - Abandoned Industrial Sewer Network)

2012

IRA (CC-BAAP-44 - Abandoned Industrial Sewer Network)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates


Site ID	Site Name	ROD/DD Title	ROD/DD Date
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Final RA(C) Completion Date:

Schedule for Next Five-Year Review: 2013

Estimated Completion Date of CR at Installation (including LTM phase): 201407

BADGER ARMY AMMUNITION PLANT CR Schedule

 = phase underway

SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
CC-BAAP-44	Abandoned Industrial Sewer Network	RFI/CMS						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201301

Restoration Advisory Board (RAB): RAB established 1993

RAB Adjournment Date:

RAB Adjournment Reason:

Additional Community Involvement Information

At each phase of the environmental restoration process, public information meetings have been held at BAAP to keep the community informed of the progress of the cleanup program. In January 1993, the installation began publishing an environmental newsletter to keep the employees, local citizens, and politicians updated on the environmental work that was underway.

In 1993, the Badger Environmental Board of Advisors (BEBA) was formed to provide a venue for citizens to participate in the cleanup program at the installation. The first BEBA meeting was held in September 1993 and the group has continued since that time.

The BEBA was formed before the guidelines for Army RABs were finalized. The BEBA had functioned as the Badger RAB until November 2000, when the BEBA refused the Army's request for the BEBA to comply with current RAB guidance.

The BEBA members were able to transition to an expanded regulatory-compliant RAB, which began meeting in January 2001 and continues to meet and advise the Army on restoration issues.

In 2002, the Badger Intergovernmental Group was formed by GSA to work toward the disposal of BAAP real estate. The group held public meetings about every two months. This provided another opportunity for the community to give input on the actions being taken to prepare the installation for new ownership. This group led to the formation of the county-led Badger Oversight and Management Commission that focuses on uses of the installation after the parcels transfer out of Army control.

A community involvement survey of residents impacted by Badger AAP groundwater issues was conducted in December 2011. The results indicate some changes in RAB representation and increased communication efforts would help the community.

Administrative Record is located at

Badger AAP
S7560 US Highway 12, North Freedom, WI 53951
608.963.3238

Information Repository is located at

Sauk City Public Library
515 Water Street, Sauk City, WI 53583
608.643.8346

Ruth Culver Community Library
540 Water Street, Prairie du Sac, WI 53578
608.643.8318

Current Technical Assistance for Public Participation (TAPP): 200309

TAPP Title: 2003 TAPP Grant

Community Involvement

Current Technical Assistance for Public Participation (TAPP): 200805

TAPP Title: explain Settling Ponds FS

Potential TAPP:

